1882

COOMBS & CO.

FORT WAYNE,

IND.

PUBLIC LIBRARY
FORT WAYNE & ALLEN CO., IND.

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Coombs & Co.Fort Wayne, Ind.
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heavy hardware, ...

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PRICE LIST.

COOMBS & CO.,

IRON, STEEL & HEAVY HARDWARE,

MANUFACTURERS AND JOBBERS OF

WOOD STOCK AND WAGON LUMBER,

FORT WAYNE, IND.

THE PUBLIC LIBRARY
OF
FORT WAYNE AND ALLEN COUNTY, IND.

FORT WAYNE, IND.:
GAZETTE CO., BOOK AND JOB PRINTERS.
1882.

FORT WAYNE AND ALLEN COUNTY, IND.
THE PUBLIC LIBRARY
OF

TERMS CASH

Unless otherwise agreed.

When longer time than thirty days is given, all accounts MUST BE SETTLED MONTHLY by Note or acceptance.

No goods will be delivered to parties having bills past due.

We will not pay Exchange or Express Charges, as all bills are payable at our office.

615732

SEP 27 1947

SEP 22 1947

CIRCULAR.

We issue our Catalogue as a book of reference more than as a Price List, since it is impossible to give the changes of the market in so expensive a form. We therefore request our patrons to write us for special prices when in need of goods. We guarantee all orders filled at as low prices as in any western market. We shall issue occasional discount and correction sheets from our Catalogue, and parties not receiving them will please write us.

Respectfully yours,

Coombs & Co.

BEST REFINED ROLLED IRON.

Standard Classification and List of Extras.

ORDINARY SIZES.

Flats, $1\frac{1}{2}$ to 4 by $\frac{3}{8}$ to 1.....
Rounds and Squares, 1 to $1\frac{7}{8}$ ..... Rate

EXTRA SIZES.

$4\frac{1}{4}$ to 6 by $\frac{3}{8}$ to 1	Advances	$\frac{1}{10}$
$1\frac{3}{4}$ to 6 by $1\frac{1}{8}$ to $1\frac{1}{2}$	"	$\frac{4}{10}$
$1\frac{1}{2}$ and $1\frac{3}{8}$ by $\frac{3}{8}$ to $\frac{3}{4}$	"	$\frac{1}{10}$
1 and $1\frac{1}{8}$ by $\frac{3}{8}$ to $\frac{3}{4}$	"	$\frac{2}{10}$
$\frac{5}{8}$, $\frac{3}{4}$ and $\frac{7}{8}$ by $\frac{3}{8}$ to $\frac{5}{8}$	"	$\frac{4}{10}$

LARGE FLATS.

Made on Universal Rolls.

2 to 4 by $1\frac{3}{4}$ to 2	Advances	1
2 to 4 by $2\frac{1}{8}$ to 3	"	$1\frac{2}{10}$
$4\frac{1}{8}$ to 6 by $1\frac{1}{8}$ to 2	"	$1\frac{3}{10}$
$4\frac{1}{8}$ to 6 by $2\frac{1}{8}$ to 3	"	$1\frac{4}{10}$
$6\frac{1}{8}$ to 8 by $\frac{3}{16}$ to $\frac{3}{8}$	"	$1\frac{5}{10}$
$6\frac{1}{8}$ to 8 by $\frac{7}{16}$ to 1	"	$1\frac{1}{10}$
$6\frac{1}{8}$ to 8 by $1\frac{1}{8}$ to 2	"	$1\frac{3}{10}$
$6\frac{1}{8}$ to 8 by $2\frac{1}{8}$ to 3	"	$1\frac{7}{10}$

ROUNDS AND SQUARES.

2 to $2\frac{5}{8}$	Advances	$\frac{2}{10}$
$2\frac{3}{4}$ to $3\frac{1}{4}$	"	$\frac{5}{10}$
$3\frac{3}{8}$ to 4	"	1
$4\frac{1}{4}$ to 5	"	$1\frac{9}{10}$
$5\frac{1}{4}$ to $5\frac{3}{4}$	"	2
6 to $6\frac{1}{2}$	"	$2\frac{1}{10}$
$6\frac{3}{4}$ to 7	"	$2\frac{3}{10}$
$\frac{3}{4}$ to $\frac{7}{8}$	"	$\frac{1}{10}$
$\frac{5}{8}$ to $\frac{9}{16}$	"	$\frac{2}{10}$
$\frac{1}{2}$ to $\frac{7}{16}$	"	$\frac{4}{10}$
$\frac{3}{8}$	"	$\frac{6}{10}$
$\frac{5}{16}$	"	$\frac{8}{10}$
$\frac{1}{4}$	"	1
$\frac{3}{16}$	"	3

HORSE-SHOE IRON.

$\frac{5}{8}$ to $1\frac{1}{4}$ by $\frac{5}{16}$ to $\frac{7}{8}$	Advances	1

HEAVY BANDS.

$1\frac{1}{2}$ to 6 by $\frac{1}{4}$ and $\frac{5}{16}$	Advances	$\frac{2}{10}$
1 to $1\frac{3}{8}$ by $\frac{1}{4}$ and $\frac{5}{16}$	"	$\frac{3}{10}$
$\frac{3}{4}$ to $\frac{7}{8}$ by $\frac{1}{4}$ and $\frac{5}{16}$	"	$\frac{5}{10}$
$\frac{5}{8}$ and $\frac{1}{2}$ by $\frac{1}{4}$ and $\frac{5}{16}$	"	1

LIGHT BANDS.

3 to 6 by $\frac{1}{8}$ to $\frac{3}{16}$	Advances	$\frac{3}{10}$
3 to 6 by No. 11 and No. 12	"	$\frac{5}{10}$
$1\frac{1}{2}$ to $2\frac{3}{4}$ by $\frac{1}{8}$ to $\frac{3}{16}$	"	$\frac{5}{10}$
$1\frac{1}{2}$ to $2\frac{3}{4}$ by No. 11 and No. 12	"	$\frac{7}{10}$
1 to $1\frac{3}{8}$ by $\frac{1}{8}$ to $\frac{3}{16}$	"	$\frac{7}{10}$
1 to $1\frac{3}{8}$ by No. 11 and No. 12	"	$\frac{9}{10}$
$\frac{3}{4}$ and $\frac{7}{8}$ by $\frac{1}{8}$ and $\frac{3}{16}$	"	1
$\frac{3}{4}$ and $\frac{7}{8}$ by No. 11 and No. 12	"	$1\ \frac{2}{10}$
$\frac{5}{8}$ and $\frac{1}{2}$ by $\frac{1}{8}$ and $\frac{3}{16}$	"	$1\ \frac{5}{10}$
$\frac{5}{8}$ and $\frac{1}{2}$ by No. 11 and No. 12	"	$1\ \frac{7}{10}$

OVAL IRON.

$\frac{7}{8}$ to $1\frac{1}{4}$	Advances	$\frac{4}{10}$
$\frac{5}{8}$ to $\frac{3}{4}$	"	$\frac{6}{10}$
$\frac{1}{2}$	"	$\frac{8}{10}$
$\frac{3}{8}$	"	$1\ \frac{2}{10}$

HALF OVAL AND HALF ROUND.

$\frac{7}{8}$ to $1\frac{1}{4}$	Advances	$\frac{7}{10}$
$\frac{5}{8}$ to $\frac{3}{4}$	"	$1\ \frac{2}{10}$
$\frac{1}{2}$	"	$1\ \frac{5}{10}$
$\frac{3}{8}$	"	3

WAGON BOX IRON.

$\frac{3}{4}$ and $\frac{7}{8}$ by Nos. 10 to 12	Advances	$1\ \frac{5}{10}$
$\frac{3}{4}$ and $\frac{7}{8}$ by Nos. 13 and 14	"	$1\ \frac{8}{10}$

HUB BAND IRON.

$1\frac{1}{4}$ inches wide	Advances	$1\ \frac{4}{10}$
$1\frac{1}{2}$ and $1\frac{3}{4}$ inches wide	"	$1\ \frac{2}{10}$

SAND BAND IRON.

$1\frac{1}{2}$ inches wide	Advances	$\frac{9}{10}$

HOOP IRON.

1¼	to	4	Nos.	13	to	15	Advance over Bar Iron			8/10
1¼	to	2	Nos.	16	to	18	"	"	"	9/10
1¼	to	2	No.	19			"	"	"	1
1¼	to	2	No.	20			"	"	"	1 1/10
1	and	1⅛	Nos.	13	to	15	"	"	"	1
1	and	1⅛	Nos.	16	to	19	"	"	"	1 1/10
1	and	1⅛	No.	20			"	"	"	1 2/10
⅞	Nos.	13	to	15			"	"	"	1 2/10
⅞	Nos.	16	to	18			"	"	"	1 3/10
⅞	Nos.	19	and	20			"	"	"	1 4/10
13/16	Nos.	13	to	15			"	"	"	1 4/10
13/16	Nos.	16	to	18			"	"	"	1 5/10
13/16	Nos.	19	and	20			"	"	"	1 6/10
¾	Nos.	13	to	15			"	"	"	1 5/10
¾	Nos.	16	to	18			"	"	"	1 6/10
¾	Nos.	19	and	20			"	"	"	1 7/10
¾	No.	22					"	"	"	1 9/10
11/16	Nos.	13	to	15			"	"	"	1 7/10
11/16	Nos.	16	to	18			"	"	"	1 8/10
11/16	Nos.	19	and	20			"	"	"	1 9/10
⅝	Nos.	13	to	15			"	"	"	1 9/10
⅝	Nos.	16	to	18			"	"	"	2
⅝	Nos.	19	and	20			"	"	"	2 1/10
⅝	No.	22					"	"	"	2 3/10
9/16	Nos.	13	to	15			"	"	"	2 1/10
9/16	Nos.	16	to	18			"	"	"	2 2/10
9/16	Nos.	19	and	20			"	"	"	2 3/10
9/16	No.	22					"	"	"	2 5/10
7/16	and ½	Nos.	13	to	15		"	"	"	2 3/10
7/16	and ½	Nos.	16	to	18		"	"	"	2 4/10
7/16	and ½	Nos.	19	and	20		"	"	"	2 6/10
7/16	and ½	No.	22				"	"	"	2 8/10

1/10 cent per lb. extra for each gauge lighter than indicated.

1/10 cent per lb. extra for cutting Hoops specified lengths.

CUT HOOP IRON.

Six Hoops to Set.

1¼ to 2 in. 9 lb. or heavier, per set	Advance over Bar Iron			1
1¼ to 2 in. 8 lb. and lighter than 9 lb	"	"	"	1 1/10
1¼ to 2 in. lighter than 8 lb. per set	"	"	"	1 2/10

NORWAY AND SWEDISH IRON.

Imported Bars.

$1\frac{1}{4}$ to 3 inch by $\frac{3}{8}$ to 1 inch Flat Bars.....
$\frac{3}{4}$ to 2 inch Square.....
$\frac{3}{4}$ to $1\frac{1}{2}$ inch Round..... } $5\frac{1}{2}$ cents

NORWAY SHAPES.

$\frac{3}{4}$ to 1 inch by $\frac{3}{8}$ to $\frac{5}{8}$ inch Flat Bars..... } $6\frac{1}{2}$ cents
$\frac{3}{8}$ to $\frac{5}{8}$ inch Round and Square.....

$\frac{5}{8}$ to 1 inch by $\frac{3}{16}$ to $\frac{5}{16}$ Flat Bars.....
$\frac{3}{4}$ to 1 inch Oval.....
$\frac{9}{16}$ to 1 inch Half Round.....
$\frac{1}{4}$ and $\frac{5}{16}$ inch Round..... } $6\frac{3}{4}$ cents

$\frac{1}{2}$ and $\frac{5}{8}$ inch Oval.....
$\frac{1}{2}$ and $\frac{7}{16}$ inch Half Round.....
$\frac{3}{4}$ to 1 inch Half Oval..... } 7 cents

$\frac{1}{2}$ and $\frac{5}{8}$ inch Half Oval.....
$\frac{3}{8}$ inch Half Round..... } $7\frac{1}{4}$ cents

SIZES IN STORE.

$\frac{5}{8}$ and $\frac{3}{4}$ by $\frac{1}{4}$, $\frac{5}{16}$, and $\frac{3}{8}$. $\frac{7}{8}$ and 1 by $\frac{1}{2}$, $\frac{5}{16}$, $\frac{5}{8}$, and $\frac{1}{2}$. $\frac{3}{8}$, to 2 inch Square. $\frac{1}{4}$ to $1\frac{1}{2}$ inch Round. $\frac{3}{8}$ to 1 inch Oval. $1\frac{1}{4}$ and $1\frac{1}{2}$ by $\frac{3}{8}$, $\frac{1}{2}$, and $\frac{5}{8}$. $1\frac{3}{4}$ and 2 by $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{3}{4}$. $2\frac{1}{2}$ ond 3 by $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{3}{4}$. $\frac{1}{2}$, and $\frac{3}{4}$ Half Oval. $\frac{1}{2}$, and $\frac{3}{4}$ Half Oval.

NORWAY NAIL RODS.

In 25 lb. and 50 lb. Bundles.....$7\frac{1}{2}$ cents

TONGUE CAP IRON.

$1\frac{3}{4}$, 2, and $2\frac{1}{4}$ inches wide.....Advances $\frac{9}{10}$

SAW MILL TRACK IRON.

$2\frac{1}{4}$ flat part, 12 feet bars.....Advances 2

STANDARD CARD

—OF—

WESTERN NAIL ASSOCIATION.

NAILS.

10d to 60d Nails, Fence and Brads			
8d and 9d " "	25c	above 10d	Nails.
6d and 7d " "	50c	" 10d	"
4d and 5d " "	75c	" 10d	"
3d " "	1 50	" 10d	"
2d " "	2 75	" 10d	"
4d Fine " "	1 75	" 10d	"
3d " " "	3 00	" 10d	"
2d " " "	3 75	" 10d	"
Clinch, all sizes	1 75	" 10d	"
Cut Spikes, 3 to 8 inch	25	" 10d	"
Barrel Nails, 1 inch	2 50	" 10d	"
" " $\frac{7}{8}$ inch	3 00	" 10d	"
" " $\frac{3}{4}$ inch	4 00	" 10d	"
Cut Boat Spikes	75	" 10d	"
Tobacco, 6d to 10d	50	Above Common Nails of same size	
Casing and Box, 4d to 20d	75		
Finishing, 4d to 20d	1 25		
Slating, 2d to 5d	25		

Each Half Keg, 10 *Cents Extra.*

LENGTHS AND NUMBER OF NAILS TO POUND.

Sizes	Common.	Clinch.	Fence.	Finishing.	Fine.	Barrel.	Casing.	Shingle.	Brads.	Tobacco.	Cut Spikes	Length.
¾ in.	.....	.....	.....	.....	.....	800	.....	.....	.....	.....	.....	¾ in
⅞ in.	.....	.....	.....	.....	.....	500	.....	.....	.....	.....	.....	⅞ "
2d	800	.....	.....	1100	1000	376	.....	.....	.....	.....	.....	1 "
3d	464	.....	.....	720	800	224	.....	.....	.....	.....	.....	1¼ "
4d	296	.....	.....	523	368	180	398	.....	.....	.....	.....	1½ "
5d	224	.....	.....	410	.....	.....	.....	178	.....	130	.....	1¾ "
6d	168	95	84	268	.....	.....	224	.....	126	96	.....	2 "
7d	120	74	64	188	.....	.....	.....	.....	98	82	.....	2¼ "
8d	88	62	48	146	.....	.....	128	74	75	68	.....	2½ "
9d	70	53	36	130	.....	.....	110	60	65	.....	.....	2¾ "
10d	60	46	30	102	.....	.....	91	52	55	.....	28	3 "
12d	48	42	24	76	.....	.....	71	.....	40	.....	.....	3¼ "
16d	36	38	20	62	.....	.....	54	.....	27	.....	22	3½ "
20d	24	33	16	54	.....	.....	40	.....	....	.....	14½	4 "
30d	17	20	.....	.....	.....	.....	33	.....	.....	.....	12½	4½ "
40d	13	.....	.....	.....	.....	.....	27	.....	.....	.....	9½	5 "
50d	9½	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	5½ "
60d	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	6 "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5½	6½ "
.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	4½	7 "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2½	8 "

5 lbs. of 4d, or 3¾ lbs. of 3d, will lay 1000 shingles; 5¾ lbs. of 3d fine will put on 1000 laths, 4 nails to the lath.

REFINED CAST TOOL STEEL.

CRESCENT REFINED, ordinary sizes	per lb	15 cents
CRESCENT EXTRA, " "	"	18 "
CRESCENT SPECIAL, " "	"	22 "
SOFT CENTRE TAP STEEL, ordinary sizes	"	18 "

ORDINARY SIZES.

SQUARE, OCTAGON AND ROUND,

$\frac{5}{8}$ to 2 inch inclusive.

FLAT.

$\frac{1}{2}$ x $\frac{5}{16}$ and over. $\frac{5}{8}$ x $\frac{1}{4}$ and over. $\frac{5}{4}$, $\frac{7}{8}$, and 1 in. by $\frac{3}{16}$ and over. $1\frac{1}{8}$ to 2 in. inclusive, by $\frac{1}{8}$ and over. $2\frac{1}{4}$ x $\frac{1}{8}$ to $1\frac{5}{8}$. $2\frac{1}{2}$ x $\frac{1}{8}$ to $1\frac{1}{2}$. $2\frac{5}{4}$ x $\frac{1}{8}$ to $1\frac{5}{8}$. 3 x $\frac{1}{8}$ to $1\frac{1}{2}$. $3\frac{1}{2}$ x $\frac{1}{8}$ to $1\frac{1}{2}$. 4 x $\frac{1}{8}$ to 1. $4\frac{1}{2}$ x $\frac{1}{8}$ to $\frac{7}{8}$. 5 x $\frac{1}{8}$ to $\frac{5}{4}$. 6 x $\frac{1}{8}$ to $\frac{5}{8}$.

EXTRA SIZES OF TOOL STEEL.

EXTRA, per lb.	19	11	6	3	2	1	1	2	3 cts
SQUARE	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{5}{16}$	$2\frac{1}{8}$ to 3	$3\frac{1}{8}$ to 4	$4\frac{1}{2}$ in
EXTRA, per lb.	14	11	6	3	2	1	1	2	3 cts
ROUND	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{5}{16}$	$2\frac{1}{8}$ to 3	$3\frac{1}{8}$ to $3\frac{1}{2}$	$3\frac{5}{8}$ to 4 in
EXTRA, per lb.	11	4	1	2	1	2	1 ct
FLAT	$\frac{1}{4}$ x $\frac{1}{8}$	$\frac{3}{8}$ x $\frac{1}{8}$	$\frac{3}{8}$ x $\frac{1}{4}$	$\frac{1}{2}$ x $\frac{1}{8}$	$\frac{1}{2}$ x $\frac{3}{16}$, and $\frac{1}{4}$	$\frac{5}{8}$ x $\frac{1}{8}$	$\frac{5}{8}$ x $\frac{3}{16}$ in
EXTRA, per lb.	1	1	1	1 ct
FLAT	$\frac{3}{4}$, $\frac{7}{8}$, & 1 x $\frac{1}{8}$	$2\frac{1}{4}$ x $1\frac{5}{8}$ & over	$2\frac{3}{4}$ x $1\frac{1}{2}$ & over	3 x $1\frac{3}{8}$ & over
EXTRA, per lb.	1	1	2 cts
FLAT	$3\frac{1}{2}$ x $1\frac{1}{4}$ to $2\frac{1}{2}$	4 x $1\frac{1}{8}$ to $2\frac{1}{4}$	4 x $2\frac{1}{2}$ to $3\frac{3}{4}$ in
EXTRA, per lb.	1	2 cts
FLAT	$4\frac{1}{2}$ x 1 to 2	$4\frac{1}{2}$ x $2\frac{1}{4}$ to $3\frac{1}{2}$ in
EXTRA, per lb.	1	2	1	2 cts
FLAT	5 x $\frac{7}{8}$ to $1\frac{3}{4}$	5 x 2 to 3	6 x $\frac{3}{4}$ to $1\frac{1}{2}$	6 x $1\frac{5}{4}$ to $2\frac{1}{2}$ in

CUTTING TO LENGTH, ½ ct. EXTRA PER POUND.

Our Customers will find it to their interest to specify, whenever possible, the purpose for which the steel ordered is to be used.

SPRING STEEL.

1½ to 4 inch by Nos. 3 and 4	per lb	7 cents
1¼ inch by Nos. 3 and 4	"	7 "
1⅛ inch by Nos. 3 to 6	"	7 "
1 inch by Nos. 3 to 6	"	7 "
⅞ and 1 inch by No. 10	"	10 "

CRUCIBLE CAST SPRING STEEL.

1 to 4 x ¼ to ½ inch	per lb	8½ cents
⅞ to 3 x 5/32 to 3/16 inch	"	10 "
¾ to 3 x No. 10 to 20 gauge	"	13 "
⅜ to ⅝ x No. 10 to 20 gauge	"	15 "

TIRE STEEL.

1⅛ to 1⅜ x ¼, 5/16 and ⅜	per lb	5 cents
¾ to 1 x 3/16 to 5/16	"	5 "
¾ to 1 x ⅛	"	6 "
¾ x ⅝ and ⅛	"	7 "
⅝ and ¾ x 3/32 and 1/16	"	10 "

We make both Round and Square Edges.

SLEIGH SHOE STEEL.

2 and 2½ x ½	per lb	4½ cents
1⅛ x ⅝, 7/16, and ½	"	
1 x ½, 7/16, and ⅜	"	
⅞ x ½, 7/16, and ⅜	"	
¾ x ½, 7/16, and ⅜	"	

CUTTER SHOES—TAPERED AND BENT.

1⅛ x ⅝, ½, and 7/16	per lb	5½ cents
1 x ½, 7/16, and ⅜	"	
⅞ x ½, 7/16, and ⅜	"	
¾ x ½, 7/16, and ⅜	"	

TOE CALK STEEL.

½ x 5/16, 9/16, x ⅜, ⅝ x ⅜ ..... per lb 6½ cents

ROUND MACHINERY STEEL.

$\frac{8}{8}$ to 2 inches	per lb	$6\frac{1}{2}$	cents
$\frac{5}{16}$ and $2\frac{1}{8}$ to 3 inches	"	$7\frac{1}{2}$	"
$\frac{1}{4}$ and $3\frac{1}{8}$ to 6 inches	"	$8\frac{1}{2}$	"

PIKE AND CANT HOOK STEEL.

All sizes	per lb	10	cents

GERMAN SLAB PLOW STEEL.

$6\frac{1}{2}$ to 16 x $\frac{3}{16}$ to $\frac{8}{8}$ inch	per lb	6	cents
4 to 6 x $\frac{3}{16}$ to $\frac{8}{8}$ inch	"	$6\frac{1}{4}$	"

CAST SLAB PLOW STEEL.

$6\frac{1}{2}$ to 16 x $\frac{3}{16}$ to $\frac{8}{8}$ inch	per lb	...	cents
4 to 6 x $\frac{3}{16}$ to $\frac{8}{8}$ inch	"	...	"

HAMMERED LAY STEEL.

1 to 2 x $\frac{5}{16}$ to $\frac{1}{2}$ inch	per lb	$8\frac{1}{2}$	cents

FINISHED SHOVEL PLOW POINTS.

With Bolts.

Single Shovel.	Large, medium, and small	per lb	8	cents
Double Shovels		"	8	"
Bull Tongues		"	8	"

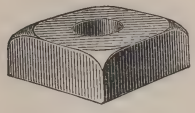
GALVANIZED SHEET STEEL.

For Bending Purposes, Nos. 10 to 20	per lb	15	cents

FROG STEEL.

2 and $2\frac{1}{2}$ x $\frac{8}{4}$ inch	per lb	7	cents

HOT PRESSED SQUARE NUTS.

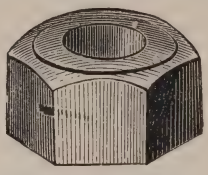


STANDARD LIST.

Size of Square	Thickness	Diameter of Hole.	Size of Bo t	No. in Keg of 200 lbs.	Price per lb.
1/2	1/4	7/32	1/4	14844	20
5/8	5/16	9/32	5/16	7880	17
3/4	3/8	11/32	3/8	4440	15
7/8	7/16	13/32	7/16	2732	13½
7/8	1/2	7/16	1/2	2450	
1	1/2	7/16	1/2	1816	
1 1/8	1/2	1/2	9/16	1390	12½
1 1/8	5/8	9/16	5/8	1174	
1 1/4	5/8	9/16	5/8	898	12
1 3/8	3/4	21/32	3/4	662	
1 1/2	3/4	21/32	3/4	538	
1 5/8	7/8	25/32	7/8	392	
1 3/4	7/8	25/32	7/8	326	
1 3/4	1	7/8	1	304	11½
2	1	7/8	1	224	
2	1 1/8	1 1/16	1 1/8	214	
2 1/4	1 1/8	1 1/16	1 1/8	152	
2 1/4	1 1/4	1 1/16	1 1/4	143	
2 1/2	1 1/4	1 1/16	1 1/4	108	12½
2 3/4	1 3/8	1 5/16	1 3/8	83	
3	1 1/2	1 5/16	1 1/2	65	13
3 1/4	1 5/8	1 7/16	1 5/8	59	
3 1/2	1 3/4	1 9/16	1 3/4	42	
3 3/4	1 7/8	1 11/16	1 7/8	32	14
4	2	1 13/16	2	27	

Sizes not enumerated on above lists, will be charged extra, at discretion of the manufacturer.

HOT PRESSED HEXAGON NUTS.

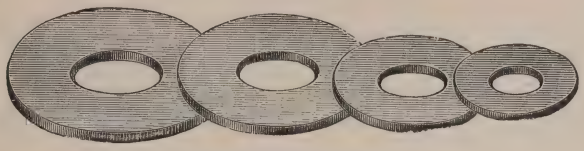


STANDARD LIST.

Size of Square	Thickness	Diameter of Hole.	Size of Bolt	No. in Keg of 200 lbs.	Price per lb.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{1}{4}$	17332	30
$\frac{5}{8}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	8964	25
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{3}{8}$	5016	20
$\frac{7}{8}$	$\frac{7}{16}$	$\frac{13}{32}$	$\frac{7}{16}$	2988	18
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	2674	
1	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	2160	
$1\frac{1}{8}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	1445	16
$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	1310	
$1\frac{1}{4}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	1028	
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{9}{16}$	$\frac{3}{8}$	920	15
$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	752	
$1\frac{1}{2}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	510	
$1\frac{1}{2}$	$\frac{7}{8}$	$\frac{21}{32}$	$\frac{3}{4}$	510	
$1\frac{5}{8}$	$\frac{7}{8}$	$\frac{23}{32}$	$\frac{7}{8}$	450	
$1\frac{5}{8}$	1	$\frac{25}{32}$	$\frac{7}{8}$	428	$14\frac{1}{2}$
$1\frac{3}{4}$	1	$\frac{7}{8}$	1	372	
$1\frac{3}{4}$	$1\frac{1}{8}$	$\frac{7}{8}$	1	336	
2	$1\frac{1}{4}$	$\frac{15}{16}$	$1\frac{1}{8}$	211	
$2\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{16}$	$1\frac{1}{4}$	159	
$2\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{3}{16}$	$1\frac{3}{8}$	119	$15\frac{1}{2}$
$2\frac{3}{4}$	$1\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{2}$	88	
3	$1\frac{3}{4}$	$1\frac{7}{16}$	$1\frac{5}{8}$	69	16
$3\frac{1}{4}$	$1\frac{7}{8}$	$1\frac{9}{16}$	$1\frac{3}{4}$	56	
$3\frac{1}{2}$	2	$1\frac{11}{16}$	$1\frac{7}{8}$	44	17
$3\frac{1}{2}$	2	$1\frac{13}{16}$	2	43	

Sizes not enumerated on above lists, will be charged extra, at discretion of the manufacturer.

WASHERS.



STANDARD LIST.

Diameter.	Size of Hole.	Thickness Wire Gauge.	Size of Bolt.	No. in Keg of 150 lbs.	Price per lb.
$\frac{1}{2}$	$\frac{1}{4}$	No. 18	$\frac{3}{16}$	80000	25
$\frac{5}{8}$	$\frac{5}{16}$	" 16	$\frac{1}{4}$	34285	22
$\frac{3}{4}$	$\frac{5}{16}$	" 16	$\frac{1}{4}$	22000	19
$\frac{7}{8}$	$\frac{3}{8}$	" 16	$\frac{5}{16}$	18500	17
1	$\frac{7}{16}$	No. 14	$\frac{3}{8}$	10550	15
$1\frac{1}{8}$	$\frac{1}{2}$	" 14	$\frac{7}{16}$	8000	
$1\frac{1}{4}$	$\frac{1}{2}$	No. 14	$\frac{7}{16}$	7500	13
$1\frac{3}{8}$	$\frac{9}{16}$	" 12	$\frac{1}{2}$	4500	
$1\frac{1}{2}$	$\frac{5}{8}$	No. 12	$\frac{9}{16}$	3850	
$1\frac{5}{8}$	$\frac{11}{16}$	" 10	$\frac{5}{8}$	2500	
2	$\frac{13}{16}$	" 10	$\frac{3}{4}$	1600	
$2\frac{1}{4}$	$\frac{15}{16}$	" 9	$\frac{7}{8}$	1300	$12\frac{1}{2}$
$2\frac{1}{2}$	$1\frac{1}{16}$	" 9	1	950	
$2\frac{3}{4}$	$1\frac{1}{4}$	" 9	$1\frac{1}{8}$	700	
3	$1\frac{3}{8}$	" 9	$1\frac{1}{4}$	550	

RUSSIA IRON CARRIAGE WASHERS.

In One Pound Boxes.

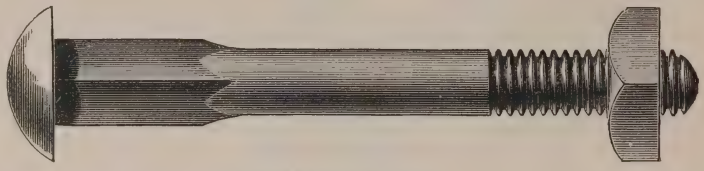
$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$ inch Bolt.
30	25	20	20	20	18	16 Cents.

RIVETTING BURRS.

In One Pound Papers.

$\frac{1}{4}$	$\frac{3}{16}$	No. 6	No. 7	No. 8	No. 9
25	30	30	30	35	35 Cents.

CARRIAGE BOLTS.



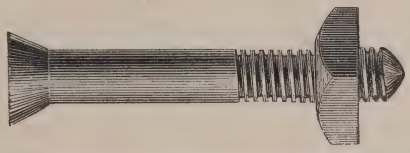
STANDARD LIST.

PRICE PER HUNDRED.

Length.	¼ in.	5/16	⅜	7/16	½	9/16 and 5/8	¾
1	$2 40	.....	.....	.....	.....	.....	.....
1¼	2 40	.....	.....	.....	.....	.....	.....
1½	2 40	$3 00	.....	.....	.....	.....	.....
1¾	2 45	3 10	.....	.....	.....	.....	.....
2	2 50	3 20	$4 00	$6 00	$7 25	.....	.....
2¼	2 55	3 30	4 15	6 20	7 50	.....	.....
2½	2 60	3 40	4 30	6 40	7 75	.....	.....
2¾	2 65	3 50	4 45	6 60	8 00	.....	.....
3	2 70	3 60	4 60	6 80	8 25	$15 00	.....
3¼	2 75	3 70	4 75	7 00	8 50	15 40	$17 20
3½	2 80	3 80	4 90	7 20	8 75	15 80	17 20
3¾	2 85	3 90	5 05	7 40	9 00	16 20	17 90
4	2 90	4 00	5 20	7 60	9 25	16 60	18 60
4¼	2 95	4 10	5 35	7 80	9 50	17 00	19 60
4½	3 00	4 20	5 50	8 00	9 75	17 40	20 00
4¾	3 05	4 30	5 65	8 20	10 00	17 80	21 50
5	3 10	4 40	5 80	8 40	10 25	18 20	22 25
5½	3 20	4 60	6 10	8 80	10 75	19 00	22 75
6	3 30	4 80	6 40	9 20	11 25	19 80	23 50
6½	3 40	5 00	6 70	9 60	11 75	20 60	24 50
7	3 50	5 20	7 00	10 00	12 25	21 40	26 00
7½	.....	5 40	7 30	10 40	12 75	22 20	27 50
8	.....	5 60	7 60	10 80	13 25	23 00	29 00
8½	.....	5 80	7 90	11 20	13 75	23 80	30 50
9	.....	6 00	8 20	11 60	14 25	24 60	32 00
9½	.....	6 20	8 50	12 00	14 75	25 40	33 50
10	.....	6 40	8 80	12 40	15 25	26 20	35 00
11	.....	.....	9 40	13 20	16 25	27 80	36 50
12	.....	.....	10 00	14 00	17 25	29 40	38 00
13	.....	.....	.....	14 80	18 25	31 00	41 00
14	.....	.....	.....	15 60	19 25	32 60	44 00
15	.....	.....	.....	.....	20 25	34 20	47 00
16	.....	.....	.....	.....	21 25	35 80	50 00

Discount.....per cent.

TIRE BOLTS.



PRICE PER HUNDRED.

Length.	3/16 and 1/4	5/16	3/8
1¼ } 1½ }	$1 90	$2 90	$3 70
1¾	1 95	2 90	3 70
2	2 00	2 90	3 70
2¼	2 05	3 00	3 82
2½	2 10	3 10	3 95
2¾	2 15	3 20	4 07
3	2 20	3 30	4 20
3¼	2 25	3 40	4 32
3½	2 30	3 50	4 45
3¾	2 35	3 60	4 57
4	2 40	3 70	4 70

Discount.....per cent.

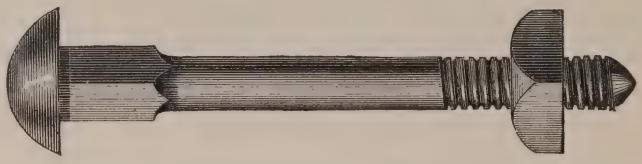
PHILADELPHIA TIRE BOLTS.

PRICE PER HUNDRED.

Length.	1/8	3/16	1/4	5/16	3/8
1	$1 50	$1 50	$1 85	$2 24	$3 20
1¼	1 50	1 50	1 85	2 24	3 20
1½	1 50	1 50	1 85	2 24	3 20
1¾	1 50	1 50	1 85	2 32	3 20
2	1 55	1 55	1 85	2 41	3 20
2¼	1 60	1 60	1 85	2 50	3 30
2½	1 65	1 65	1 85	2 58	3 40
2¾	1 70	1 70	1 92	2 66	3 50
3	.....	1 75	2 00	2 74	3 60
3¼	.....	1 80	2 08	2 82	3 70
3½	.....	1 85	2 16	2 90	3 80
3¾	.....	.....	2 23	2 98	3 90
4	.....	.....	2 30	3 06	4 00

Discount.....per cent.

PHILADELPHIA CARRIAGE BOLTS.



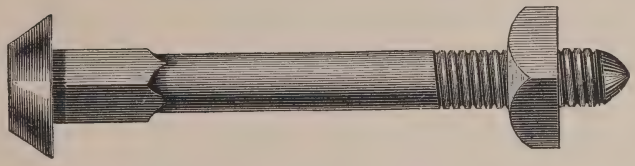
PRICE PER HUNDRED.

Length.	1/8, 3/16, 1/4 in.	5/16	3/8	7/16	1/2
1	$2 50	$3 68	$5 00	$6 16	$7 64
1¼	2 65	3 68	5 00	6 16	7 64
1½	2 80	3 68	5 00	6 16	7 64
1¾	2 95	3 85	5 00	6 16	7 64
2	3 10	4 03	5 00	6 16	7 64
2¼	3 24	4 20	5 20	6 35	7 85
2½	3 36	4 35	5 40	6 54	8 06
2¾	3 50	4 50	5 58	6 74	8 27
3	3 65	4 68	5 78	6 94	8 48
3¼	3 78	4 84	5 96	7 12	8 69
3½	3 92	5 00	6 16	7 30	8 90
3¾	4 06	5 16	6 36	7 50	9 11
4	4 20	5 30	6 56	7 70	9 34
4¼	4 34	5 48	6 74	7 90	9 55
4½	4 48	5 65	6 92	8 08	9 76
5	4 75	5 98	7 34	8 46	10 18
5½	5 02	6 30	7 70	8 86	10 60
6	5 30	6 62	8 08	9 24	11 02
6½	5 58	6 92	8 44	9 62	11 44
7	5 85	7 24	8 80	10 10	11 88
7½	6 12	7 55	9 16	10 48	12 30
8	.....	7 88	9 52	10 86	12 72
8½	.....	8 00	9 88	11 24	13 14
9	.....	8 35	10 24	11 62	13 56
9½	.....	.....	10 60	12 10	14 00
10	.....	.....	10 96	12 48	14 42
10½	.....	.....	.....	12 86	14 84
11	.....	.....	.....	13 24	15 26
11½	.....	.....	.....	.....	15 68
12	.....	.....	.....	.....	16 12

Discount.....per cent.

SKELLY'S NORWAY CARRIAGE BOLTS.

FINEST BOLT MANUFACTURED,



BEST NORWAY IRON.

PRICE PER HUNDRED.

Length.	$\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$ in	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$
1	$2 50	$3 68	$5 00	$6 16	$7 64
1¼	2 65	3 68	5 00	6 16	7 64
1½	2 80	3 68	5 00	6 16	7 64
1¾	2 95	3 85	5 00	6 16	7 64
2	3 10	4 03	5 00	6 16	7 64
2¼	3 24	4 20	5 20	6 35	7 85
2½	3 36	4 35	5 40	6 54	8 06
2¾	3 50	4 50	5 58	6 74	8 27
3	3 65	4 68	5 78	6 94	8 48
3¼	3 78	4 84	5 96	7 12	8 69
3½	3 92	5 00	6 16	7 30	8 90
3¾	4 06	5 16	6 36	7 50	9 11
4	4 20	5 30	6 56	7 70	9 34
4¼	4 34	5 48	6 74	7 90	9 55
4½	4 48	5 65	6 92	8 08	9 76
5	4 75	5 98	7 34	8 46	10 18
5½	5 02	6 30	7 70	8 86	10 60
6	5 30	6 62	8 08	9 24	11 02
6½	.....	6 92	8 44	9 62	11 44
7	.....	7 24	8 80	10 10	11 88
7½	.....	7 55	9 16	10 48	12 30
8	.....	7 88	9 52	10 86	12 72
8½	.....	.....	.....	11 24	13 14
9	.....	.....	.....	11 62	13 56
9½	.....	.....	.....	12 10	14 00
10	.....	.....	.....	12 48	14 42

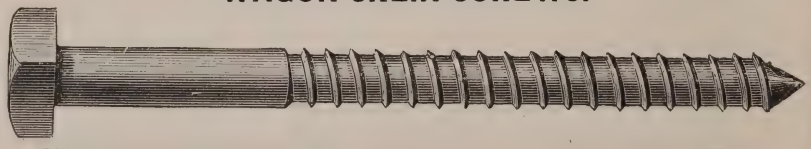
Discount.....per cent.

SKELLY'S NORWAY TIRE BOLT.

PRICE PER HUNDRED.

Length.	1/8 in.	3/16	1/4	5/16
1	$1 50	$1 50	$1 85	$2 24
1¼	1 50	1 50	1 85	2 24
1½	1 50	1 50	1 85	2 24
1¾	1 50	1 50	1 85	2 32
2	1 55	1 55	1 85	2 41
2¼	1 60	1 60	1 85	2 50
2½	1 65	1 65	1 85	2 58
2¾	.....	1 70	1 92	2 66
3	.....	1 75	2 00	2 74
3¼	.....	.....	2 08	2 82
3½	.....	.....	2 16	2 90
3¾	.....	.....	.....	2 98
4	.....	.....	.....	3 06

WAGON SKEIN SCREWS.

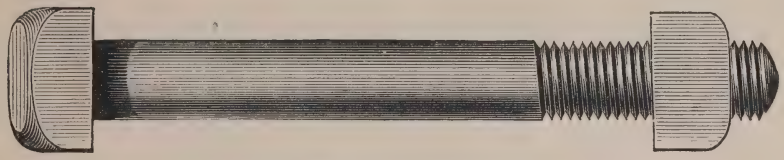


PRICE PER HUNDRED.

Length.	3/8 in.	7/16	1/2	9/16 and 5/8.	3/4
4	$4 10	$5 25	$5 80	.....	.....
4½	4 30	5 50	6 10	.....	.....
5	4 50	5 75	6 40	$8 90	$12 50
5½	4 70	6 00	6 70	9 30	13 00
6	4 90	6 25	7 00	9 70	13 50
6½	.....	6 50	7 30	10 10	14 00
7	.....	6 75	7 60	10 50	14 50
7½	.....	.....	7 90	10 90	15 00
8	.....	.....	8 20	11 30	15 50
8½	.....	.....	.....	11 70	16 00

Discount.....per cent.

MACHINE BOLTS.



WITH SQUARE HEADS AND NUTS.

PRICE PER HUNDRED.

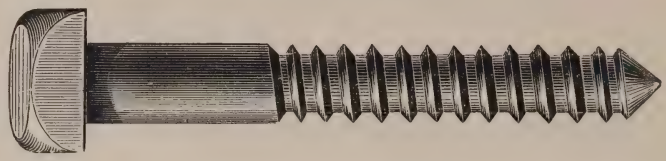
Len'th	1/4 in.	5/16	3/8	7/16	1/2	9/16 and 5/8	3/4	7/8	1
1½	$2 80	$3 20	$3 60	$4 60	$5 00	$7 20	$10 50	$14 90	$22 00
2	2 90	3 35	3 80	4 90	5 30	7 70	11 10	15 80	23 10
2½	3 00	3 50	4 00	5 20	5 60	8 20	11 70	16 60	24 20
3	3 10	3 65	4 20	5 50	5 90	8 70	12 30	17 50	25 30
3½	3 20	3 80	4 40	5 80	6 20	9 20	12 90	18 30	26 40
4	3 30	3 95	4 60	6 10	6 50	9 70	13 50	19 20	27 50
4½	3 40	4 10	4 80	6 40	6 80	10 20	14 10	20 00	28 60
5	3 50	4 25	5 00	6 70	7 10	10 70	14 70	20 90	29 70
5½	3 60	4 40	5 20	7 00	7 40	11 20	15 30	21 70	30 80
6	3 70	4 55	5 40	7 30	7 70	11 70	15 90	22 60	31 90
6½	3 80	4 70	5 60	7 60	8 00	12 20	16 50	23 40	33 00
7	3 90	4 85	5 80	7 90	8 30	12 70	17 10	24 30	34 10
7½	4 00	5 00	6 00	8 20	8 60	13 20	17 70	25 10	35 20
8	4 10	5 15	6 20	8 50	8 90	13 70	18 30	26 00	36 30
9	.....	.....	6 60	9 10	9 50	14 75	19 50	27 70	38 50
10	.....	.....	7 00	9 70	10 10	15 75	20 70	29 40	40 70
11	.....	.....	7 40	10 30	10 70	16 75	21 90	31 10	42 90
12	.....	.....	7 80	10 90	11 30	17 75	23 10	32 80	45 10
13	.....	.....	.....	.....	11 90	18 75	24 30	34 50	47 30
14	.....	.....	.....	.....	12 50	19 75	25 50	36 20	49 50
15	.....	.....	.....	.....	13 10	20 75	26 70	37 90	51 70
16	.....	.....	.....	.....	13 70	21 75	27 90	39 60	53 90
17	.....	.....	.....	.....	14 30	22 75	29 10	41 30	56 10
18	.....	.....	.....	.....	14 90	23 75	30 30	43 00	58 30
19	.....	.....	.....	.....	15 50	24 75	31 50	44 70	60 50
20	.....	.....	.....	.....	16 10	25 75	32 70	46 40	62 70

Discount.....per cent.

Bolts with Hexagon Heads or Hexagon Nuts, 10 per cent. extra.

If both Hexagon Heads and Hexagon Nuts, 20 per extra.

COACH SCREWS.



WITH SQUARE HEADS.

PRICE PER HUNDRED.

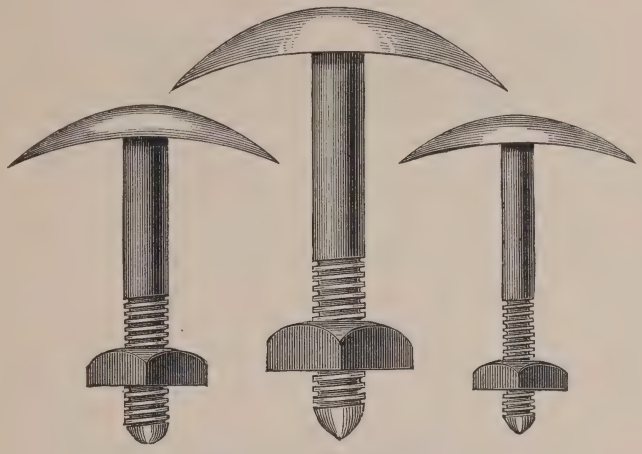
Length.	1/4 and 5/16	3/8	7/16	1/2	9/16 and 5/8	3/4	7/8	1
1½	$2 70	$3 10	$4 00	$4 30	.....	.....	.....	.....
2	2 90	3 30	4 25	4 60	$6 50	.....	.....	.....
2½	3 10	3 50	4 50	4 90	6 90	$10 00	.....	.....
3	3 30	3 70	4 75	5 20	7 30	10 50	$15 00	.....
3½	3 50	3 90	5 00	5 50	7 70	11 00	15 75	$21 60
4	3 70	4 10	5 25	5 80	8 10	11 50	16 50	22 50
4½	3 90	4 30	5 50	6 10	8 50	12 00	17 25	23 40
5	4 10	4 50	5 75	6 40	8 90	12 50	18 00	24 25
5½	4 30	4 70	6 00	6 70	9 30	13 00	18 75	25 25
6	4 50	4 90	6 25	7 00	9 70	13 50	19 50	26 25
7	.....	.....	6 75	7 60	10 50	14 50	21 00	28 25
8	.....	.....	7 25	8 20	11 30	15 50	22 50	30 25
9	.....	.....	7 75	8 80	12 10	16 50	24 00	32 25
10	.....	.....	.....	9 40	12 90	17 50	25 50	34 25
11	.....	.....	.....	10 00	13 70	18 50	27 00	36 25
12	.....	.....	.....	10 60	14 50	19 50	28 50	38 25

Discount.....per cent.

SLEIGH SHOE BOLTS.

4½	inch by	3/8	inch	per 100...	$5 50	6½	inch by	3/8	inch	per 100...	$6 70
5	"	3/8	"	"	5 80	7	"	3/8	"	"	7 00
5½	"	3/8	"	"	6 10	7½	"	3/8	"	"	7 30
6	"	3/8	"	"	6 40	8	"	3/8	"	"	7 60

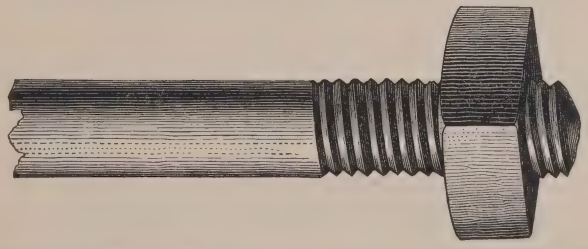
NORWAY IRON SHAFT BOLTS.



PRICE PER HUNDRED.

1 by $\frac{3}{16}$	$3 25	1 by $\frac{1}{4}$	$3 25
$1\frac{1}{4}$ by $\frac{3}{16}$	3 25	$1\frac{1}{4}$ by $\frac{1}{4}$	3 25
$1\frac{1}{2}$ by $\frac{3}{16}$	3 25	$1\frac{1}{2}$ by $\frac{1}{4}$	3 25
$1\frac{3}{4}$ by $\frac{3}{16}$	3 25	$1\frac{3}{4}$ by $\frac{1}{4}$	3 25
2 by $\frac{3}{16}$	3 25	2 by $\frac{1}{4}$	3 25

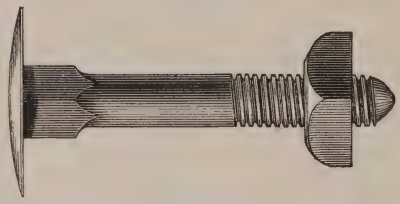
BOLT ENDS WITH SQUARE NUTS.



Size of Iron.	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$	2
Length.....	10	11	12	13	14	15	16	17	18	19	20
Price per lb.	12				14			16			

Discount.....per cent.

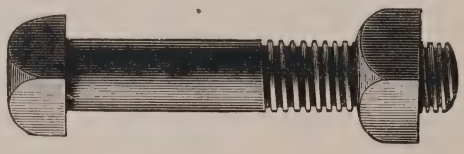
STEP BOLTS.



Norway Iron.

1	inch	by	3/16	inch	per 100..	$2 50	1	inch	by 1/4	inch	per 100... $2 50
1 1/4	"		3/16	"	"	2 65	1 1/4	"	1/4	"	" 2 65
1 1/2	"		3/16	"	"	2 80	1 1/2	"	1/4	"	" 2 80
1 3/4	"		3/16	"	"	2 95	1 3/4	"	1/4	"	" 2 95
2	"		3/16	"	"	3 10	2	"	1/4	"	" 3 10
2 1/4	"		3/16	"	"	3 24	2 1/4	"	1/4	"	" 3 24
2 1/2	"		3/16	"	"	3 36	2 1/2	"	1/4	"	" 3 36

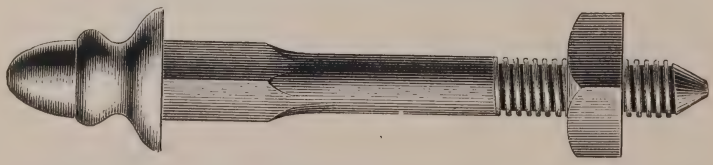
SHACKLE BOLTS.



Norway Iron.

5/16	inch	by	2 1/8	inch	per 100..	$5 00	7/16	inch	by 2 5/8	inch	per 100.. $6 50
3/8	"		2 1/4	"	"	6 50	7/16	"	2 3/4	"	" 6 50
7/16	"		2 1/2	"	"	6 50	1/2	"	3	"	" 8 00

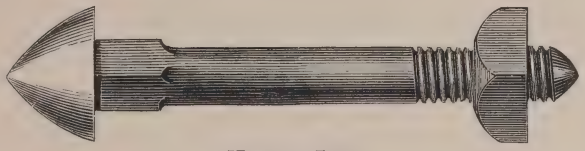
SILVER HEAD LOOP BOLTS.



Acorn Head, 2 3/4 by 1/4 and 5/16 inch.....per dozen $1 50
Steeple Head, 2 3/4 by 1/4 and 5/16 inch..... " 1 50

Gold Plate, 50 cents per dozen extra.

CONE HEAD BOLTS.



Norway Iron.

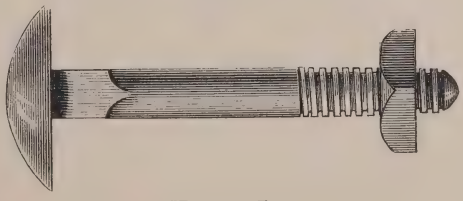
2	inch	by	$\frac{1}{4}$	inch	per 100. .	$3 10	2	inch	by	$\frac{5}{16}$ inch	per 100.. $4 03
$2\frac{1}{4}$	"		$\frac{1}{4}$	"	"	3 24	$2\frac{1}{4}$	"		$\frac{5}{16}$ "	" 4 20
$2\frac{1}{2}$	"		$\frac{1}{4}$	"	"	3 36	$2\frac{1}{2}$	"		$\frac{5}{16}$ "	" 4 35
$2\frac{3}{4}$	"		$\frac{1}{4}$	"	"	3 50	$2\frac{3}{4}$	"		$\frac{5}{16}$ "	" 4 50
3	"		$\frac{1}{4}$	"	"	3 65	3	"		$\frac{5}{16}$ "	" 4 68

STEEPLE HEAD BOLTS.

Norway Iron.

2	inch	by	$\frac{1}{4}$	inch	per 100...	$3 10	2	inch	by	$\frac{5}{16}$ inch	per 100.. $4 03
$2\frac{1}{4}$	"		$\frac{1}{4}$	"	"	3 24	$2\frac{1}{4}$	"		$\frac{5}{16}$ "	" 4 20
$2\frac{1}{2}$	"		$\frac{1}{4}$	"	"	3 36	$2\frac{1}{2}$	"		$\frac{5}{16}$ "	" 4 35
$2\frac{3}{4}$	"		$\frac{1}{4}$	"	"	3 50	$2\frac{3}{4}$	"		$\frac{5}{16}$ "	" 4 50
3	"		$\frac{1}{4}$	"	"	3 65	3	"		$\frac{5}{16}$ "	" 4 68

ELLIPTIC HEAD BOLTS.



Norway Iron.

$1\frac{1}{4}$	inch	by	$\frac{3}{16}$	inch	per 100	$2 65	$1\frac{1}{4}$	inch	by	$\frac{1}{4}$ inch	per 100 $2 65
$1\frac{1}{2}$	"		$\frac{3}{16}$	"	"	2 80	$1\frac{1}{2}$	"		$\frac{1}{4}$ "	" 2 80
$1\frac{3}{4}$	"		$\frac{3}{16}$	"	"	2 95	$1\frac{3}{4}$	"		$\frac{1}{4}$ "	" 2 95
2	"		$\frac{3}{16}$	"	"	3 10	2	"		$\frac{1}{4}$ "	" 3 10
$2\frac{1}{4}$	"		$\frac{3}{16}$	"	"	3 24	$2\frac{1}{4}$	"		$\frac{1}{4}$ "	" 3 24
$2\frac{1}{2}$	"		$\frac{3}{16}$	"	"	3 36	$2\frac{1}{2}$	"		$\frac{1}{4}$ "	" 3 36

WHIFFLETREE BOLTS.

SPUR PATTERN.

PRICE PER DOZEN.

3½ by $\frac{5}{16}$	$2 50
4 by $\frac{5}{16}$	2 50
4½ by $\frac{5}{16}$	2 50
3½ by $\frac{3}{8}$	2 50
4 by $\frac{3}{8}$	2 50
4½ by $\frac{3}{8}$	2 50

WHIFFLETREE BOLTS.

NORWAY IRON.

PRICE PER DOZEN.

3 by $\frac{5}{16}$	$ 90
$3\frac{1}{2}$ by $\frac{5}{16}$	1 10
4 by $\frac{5}{16}$	1 20
$4\frac{1}{2}$ by $\frac{5}{16}$	1 25
3 by $\frac{3}{8}$	1 10
$3\frac{1}{2}$ by $\frac{3}{8}$	1 20
4 by $\frac{3}{8}$	1 30
$4\frac{1}{2}$ by $\frac{3}{8}$	1 40

GIMLET POINT WOOD SCREWS.

PRICE LIST.

ADOPTED APRIL 27, 1881.

¼ Inch.	cts.
No. 0 @	14
1	14
2	14

⅜ Inch.	
No. 1 @	14
2	14
3	14
4	14
5	14
6	15
7	18
8	20

½ Inch.	
No. 2 @	14
3	14
4	14
5	16
6	18
7	20
8	22
9	24
10	26

⅝ Inch.	
No. 2 @	14
3	14
4	15
5	18
6	20
7	22
8	24
9	26
10	30
11	33
12	37

¾ Inch.	cts.
No. 4 @	17
5	20
6	22
7	24
8	26
9	30
10	33
11	37
12	42
13	48
14	53
15	59
16	70

⅞ Inch.	
No. 5 @	22
6	24
7	26
8	30
9	33
10	35
11	41
12	46
13	52
14	59

1 Inch.	
No. 5 @	24
6	26
7	29
8	33
9	37
10	40
11	44
12	51
13	55
14	65

1¼ Inch.	cts.
No. 7 @	35
8	40
9	44
10	48
11	53
12	59
13	68
14	75
15	85
16	95
17	106
18	117
20	140

1½ Inch.	
No. 8 @	46
9	51
10	56
11	62
12	68
13	78
14	88
15	98
16	112
17	121
18	137
20	155

1¾ Inch.	
No. 9 @	57
10	60
11	66
12	74
13	84
14	95
15	107
16	118
17	128
18	141
20	162
22	190
24	235

2 Inch.	cts.
No. 10 @	65
11	70
12	80
13	89
14	100
15	113
16	125
17	134
18	150
20	172
22	201
24	250

2¼ Inch.	
No. 11 @	75
12	86
13	95
14	108
15	120
16	130
17	142
18	160
20	183
22	212
24	271

2½ Inch.	
No. 12 @	95
13	103
14	117
15	132
16	143
17	154
18	169
20	198
22	235
24	290

2¾ Inch.	cts.
No. 13 @	112
14	128
15	143
16	154
17	172
18	189
20	227
22	267
24	317

3 Inch.	
No. 14 @	139
15	150
16	169
17	189
18	211
20	253
22	300
24	341
26	400

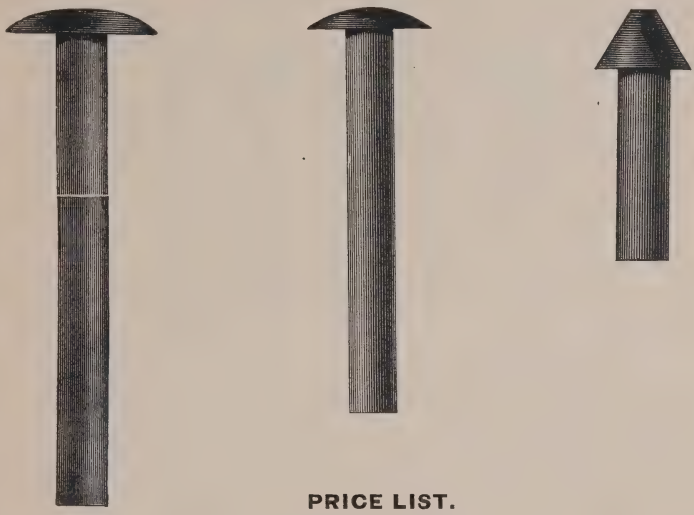
3½ Inch.	
No. 16 @	205
17	224
18	255
20	296
22	355
24	396
26	456

4 Inch.	
No. 18 @	284
20	346
22	390
24	440
26	495

Discount.....per cent.

WAGON RIVETS.

Wagon Box. Oval Head. Steeple Head.



PRICE LIST.

Oval Head, $\frac{3}{16}$ inch, any length	per lb	11	cents
Steeple Head, $\frac{3}{16}$ inch, any length	"	11	"
Oval Head, $\frac{1}{4}$ inch, any length	"	10	"
Steeple Head, $\frac{1}{4}$ inch, any length	"	10	"
Wagon Box, $\frac{1}{4}$ inch, any length	"	10	"

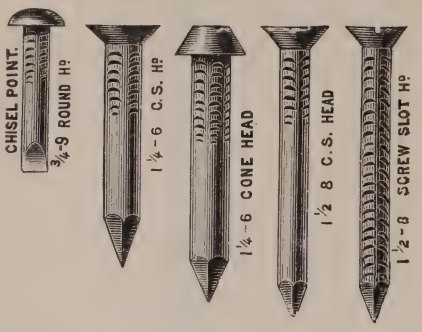
BLACK OR COOPER'S RIVETS.

PRICE LIST.

1 lb	1¼ lb	1½ lb	1¾ lb	2 lb	3 lb	4 lb	5 lb
26	23	21	20	19	17	15	14 cents
6 lb	7 lb	8 lb	9 lb	10 lb	12 lb	14 lb	16 lb
14	14	14	13	13	13	12½	12½ cents

WAGON NAILS.

WROUGHT IRON.



PRICE LIST.

Inches.	No. Wire.		Price per lb.
1¼ to 2	3 to 6	Cone Head, Square Point	10
1¼ to 2	2 to 6	Countersunk Head, Square Point	10
1¼ to 2	3 to 6	Countersunk Head, Square Point Barbed	11
1	6	" or Cone Head, Square Point	11
1	6	" Head, Square Point, Barbed	12
⅝	6	Round Head, Hub Band, Square or Short Chisel Point	11
1¼ to 1¾	8	Countersunk Head	11
1⅛ to 1¾	8	" " Barbed	12
1½	8	" and Screw Head, Barbed	12
¾ to 1	8	" Head, or Screw Head, Barbed	13
⅝	8	" " Barbed	14
¾	9	Round Head, Short Chisel Point	12
¾ to 1	9	Countersunk Head, Barbed	13
1½ to 2	10	" " "	12
⅞ to 1	10	" " "	13
⅝ and ¾	10	" " "	14
1½	10	" and Screw Head	12
⅝ and ¾	8 or 9	No Head, Hub Band	14
½ and ⅝	10	" "	15

Short chisel points on No. 6 and finer, in standard sizes as per list, same price as square points.

Long chisel points or barbing, where not stated in list one cent per lb. extra.

COIL CHAIN.

STRAIGHT AND TWIST LINK SAME PRICE.

PRICE LIST.

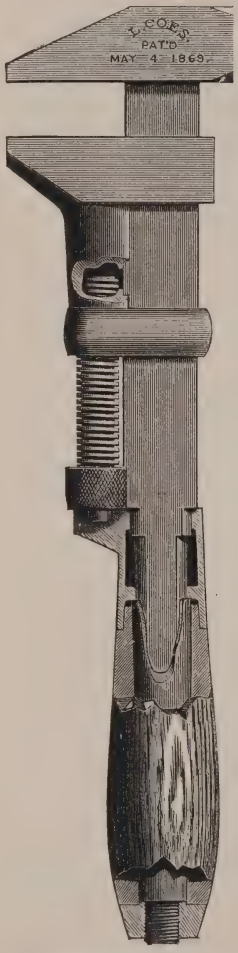
Size Iron.	Weight per Foot.	Proof Tons.	Price per lb.
$\frac{3}{16}$ inch	About $\frac{6}{10}$ lb	$\frac{1}{2}$ ton	15 cents
$\frac{1}{4}$ "	" $\frac{9}{10}$ "	$\frac{3}{4}$ "	9 "
$\frac{5}{16}$ "	" 1 "	1 "	8 "
$\frac{3}{8}$ "	" $1\frac{6}{10}$ "	2 "	$7\frac{1}{2}$ "
$\frac{7}{16}$ "	" $2\frac{2}{10}$ "	3 "	$7\frac{1}{2}$ "
$\frac{1}{2}$ "	" $2\frac{9}{10}$ "	4 "	$7\frac{1}{4}$ "
$\frac{9}{16}$ "	" $3\frac{1}{2}$ "	5 "	7 "
$\frac{5}{8}$ "	" $4\frac{1}{8}$ "	6 "	7 "
$\frac{3}{4}$ "	" $6\frac{1}{4}$ "	10 "	7 "
$\frac{7}{8}$ "	" 8 "	14 "	7 "
1 "	" $10\frac{1}{2}$ "	18 "	7 "
$1\frac{1}{8}$ "	" $13\frac{1}{4}$ "	28 "	7 "
$1\frac{1}{4}$ "	" $16\frac{1}{2}$ "	30 "	7 "

WAGON CHAINS.

STAY CHAINS,	$\frac{1}{4}$	inch with	$\frac{1}{2}$	inch Hook	.....	per lb	9	cents
" "	$\frac{5}{16}$	" "	$\frac{9}{16}$	" "	.....	"	8	"
" "	$\frac{5}{16}$	" "	$\frac{5}{8}$	" "	.....	"	8	"
LOCK CHAINS,	$\frac{1}{4}$	" "	$\frac{5}{16}$	"	Rings	"	9	"
" "	$\frac{5}{16}$	" "	$\frac{3}{8}$	" "	.....	"	8	"
TONGUE CHAINS,	$\frac{1}{4}$	inch				"	9	"
" "	$\frac{5}{16}$	"				"	8	"
SPREADER CHAINS,	$\frac{5}{16}$	inch				"	8	"
" "	$\frac{3}{8}$	"				"	$7\frac{1}{2}$	"

COE'S SCREW WRENCHES.

GENUINE IMPROVED.



PRICE LIST.

BLACK.

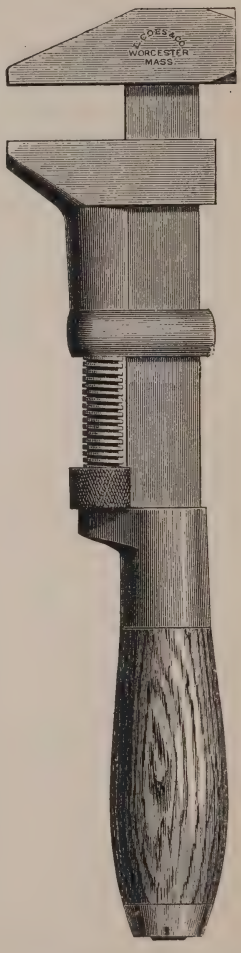
PER DOZEN.

6 inch	.....	$ 9 00
8 "	.....	10 00
10 "	.....	12 00
12 "	.....	14 00
15 "	.....	24 00
18 "	.....	30 00
21 "	.....	36 00

BRIGHT.

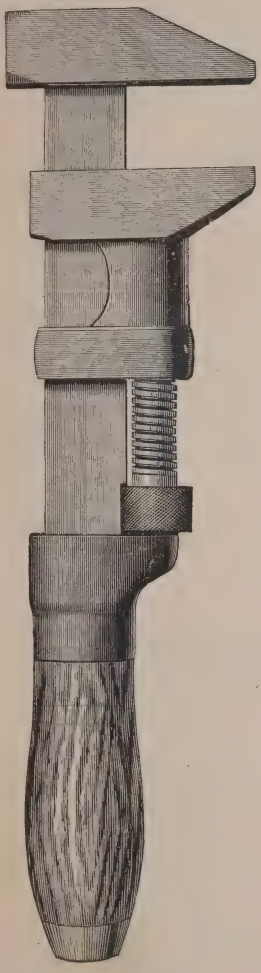
PER DOZEN.

4 inch	.....	$ 9 00
6 "	.....	10 00
8 "	.....	11 00
10 "	.....	14 00
12 "	.....	16 00
15 "	.....	26 00
18 "	.....	32 00
21 "	.....	38 00



Size of Wrench.	4	6	8	10	12	15	18	21 inch
Will open	$\frac{1}{2}$	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{1}{8}$	$2\frac{5}{8}$	3	$4\frac{1}{8}$ inch
Cases contain...	6	6	6	6	6	3	2	1 doz.

GIRARD SCREW WRENCHES.



STANDARD BLACK.

PRICE LIST.

8 inch	per dozen		$10 00
10 "	"		12 00
12 "	"		14 00
15 "	"		24 00
18 "	"		30 00
21 "	"		36 00

Discount.....per cent.

AGRICULTURAL.

PRICE LIST.

8 inch	per dozen		$10 00
10 "	"		12 00
12 "	"		14 00
15 "	"		24 00

Discount.....per cent.

CASES CONTAIN

8	10	12	15	18	21 inch
6	6	6	3	2	1 dozen

BURDEN'S HORSE AND MULE SHOES.

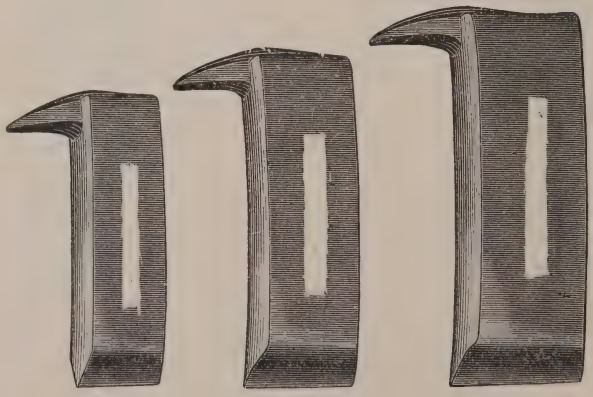
Horse Shoes, all sizes.....per keg, $....
Mule " " ..... " ....

PERKINS' HORSE AND MULE SHOES.

Horse Shoes, all sizes.....per keg, $....
Snow " " ..... " ....
Mule " " ..... " ....

STEEL TOE CALKS.

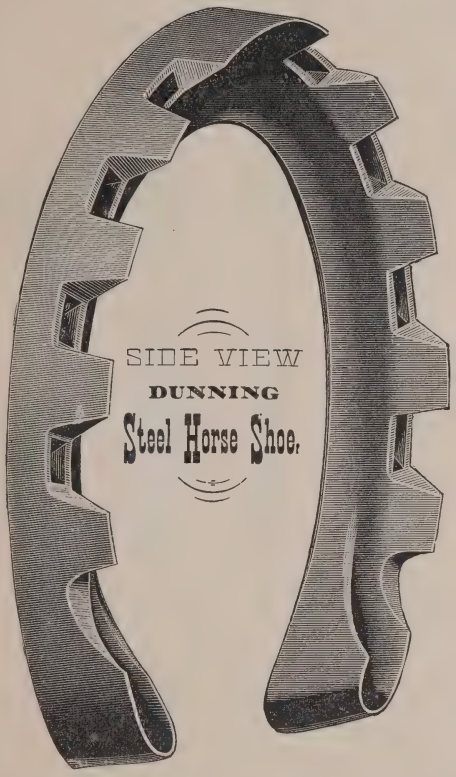
In 25 lb. Boxes.



No. 1. No. 2. No. 3.

Nos. 1 to 4.....per lb. ....

DUNNING'S STEEL HORSE SHOES.



The Dunning shoe is made in sizes from 1 to 10. In ordering, sizes compare with regular Numbers of Iron Shoes as follows:

Burden's or R. I.,

Nos. 1 2 3 4 5 6

Dunning's,

Nos. 3 4 6 8 9 10

PRICES.

All Nos.....per keg $12 00

All Nos.....per lb 15

615732

Cut the hoof as little as possible. Take great care in dressing the foot that the part to which the shoe is to be applied is perfectly level and smooth. See that the natural size and form of the foot is protected and preserved. The frog should be let quite alone.

The Dunning steel shoe, in heating and working, should be treated in all respects as *cast steel*. When properly fitted to the foot, and ready to temper, use a pail or bucket, with not more than one-eighth of an inch of water of even depth. Bring to a dark cherry red heat, and lay the shoe, calk down, in water pail, and allow it to remain till cool.

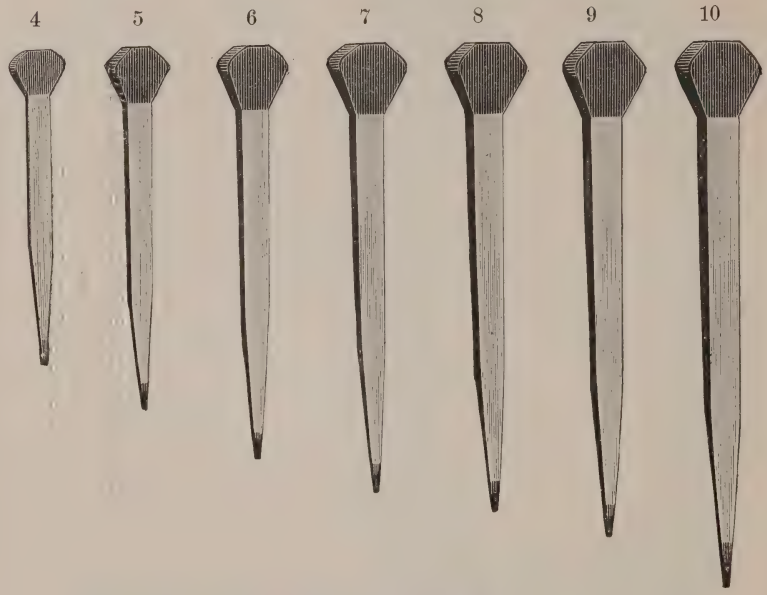
Directions for tempering should be strictly observed. Smiths will find that the shoe is soft and easily worked, and if tempered as directed, the web will retain all the elasticity and strength of steel plate, and the calks and wearing portions will be hardened to the highest and most serviceable degree attainable, and not surpassed by the best brands of tool steel.

To sharpen place the shoe on the anvil with face of shoe against the hardie or other firm tool, and draw the calk to a sharp edge with a ball-pien hammer. The heel should be drawn out and sharpened around the end of the horn of the anvil.

When calks are worn *entirely* off, it can be made into a three calk shoe, as new calks can be welded on as readily as on an iron shoe.

NORTH WESTERN HORSE NAILS.

Regular Heads.



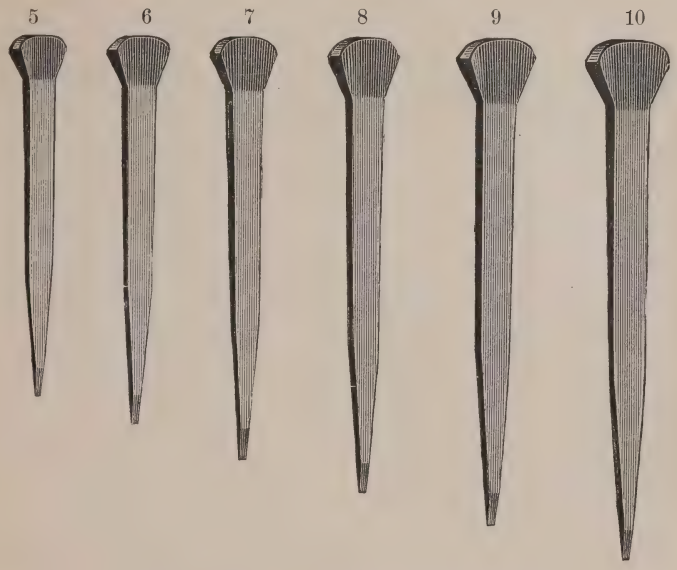
POINTED AND FINISHED.

PRICE LIST.

No.	2	Regular or City	Heads	per lb		$2 00
"	3	"	"	"		1 00
"	4	"	"	"		52
"	5	"	"	"		28
"	6	"	"	"		25
"	7	"	"	"		23
"	8	"	"	"		22
"	9	"	"	"		21
"	10	"	"	"		20

STAR HORSE SHOE NAILS.

Regular or Large Heads.



POINTED AND FINISHED READY TO DRIVE.

PRICE LIST.

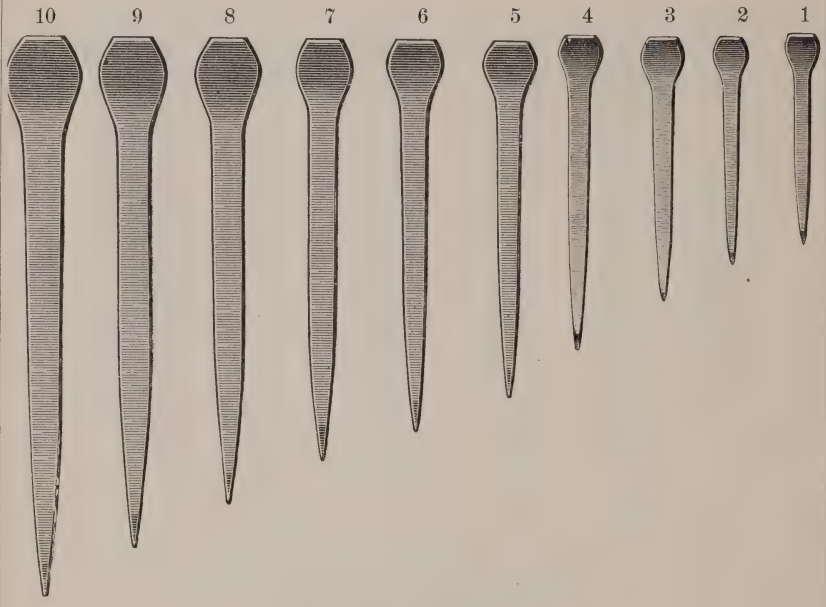
No.	4	Large or Small Heads	.....	per lb	52	cents
"	5	" " "	.....	"	28	"
"	6	" " "	.....	"	25	"
"	7	" " "	.....	"	23	"
"	8	" " "	.....	"	22	"
"	9	" " "	.....	"	21	"
"	10	" " "	.....	"	20	"

Made of Finest Quality Norway Iron.

All boxes Genuine Star Horse Nails are branded with a *Red Star.*

PUTNAM HORSE SHOE NAILS.

Hot Forged and Hammer Pointed.

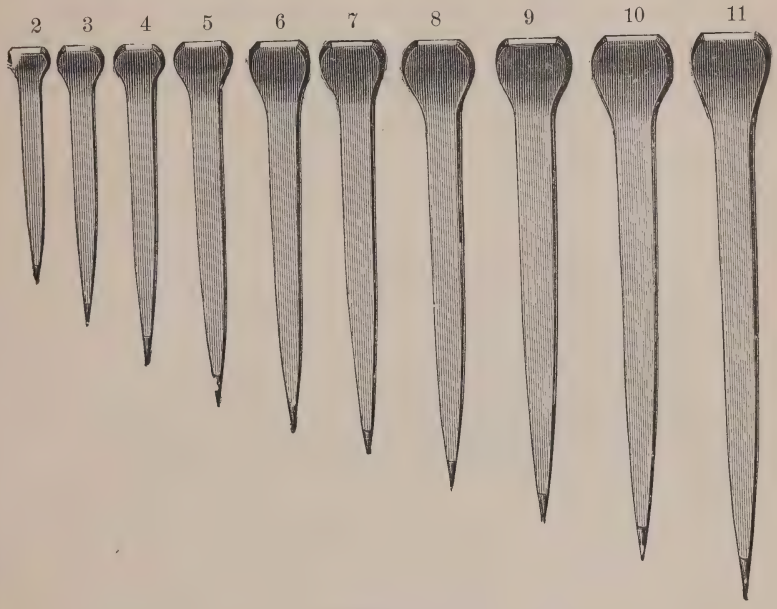


PRICE LIST.—BRIGHT.

No.	1	Plate	Nails	per lb	$3 00
"	2	"	"	"	2 00
"	3	"	"	"	1 00
"	4	Shoe	"	"	50
"	5	"	"	"	31
"	6	"	"	"	28
"	7	"	"	"	26
"	8	"	"	"	25
"	9	"	"	"	24
"	10	"	"	"	23
"	12	"	"	"	23

AUSABLE HORSE NAILS.

Pointed and Finished.



PRICE LIST.

No.	2	per lb	$2 00
"	3	"	1 00
"	4	"	50
"	5	"	31
"	6	"	28
"	7	"	26
"	8	"	25
"	9	"	24
"	10	"	23
"	11	"	23

IRON HARROW TEETH.

In 200 lb. Boxes.

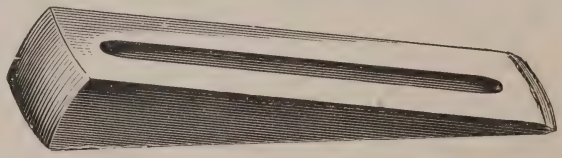
$\frac{5}{8}$ inch	Square,	all lengths	per lb	$4\frac{1}{4}$	cents
$\frac{3}{4}$ "	"	"	"	4	"
$\frac{7}{8}$ "	"	"	"	4	"
1 "	"	"	"	4	"

STEEL HARROW TEETH.

In 100 lb. Boxes.

$\frac{1}{2}$ inch	Square,	all lengths	per lb	$5\frac{1}{2}$	cents
$\frac{5}{8}$ "	"	"	"	$5\frac{1}{4}$	"
$\frac{3}{4}$ "	"	"	"	5	"
$\frac{7}{8}$ "	"	"	"	5	"

WOOD CHOPPER'S WEDGES.



Iron Wedges, all sizes	per lb	5 cents
Cast Steel Wedges, all sizes	"	8 "

CROW BARS.

Wedge Point.

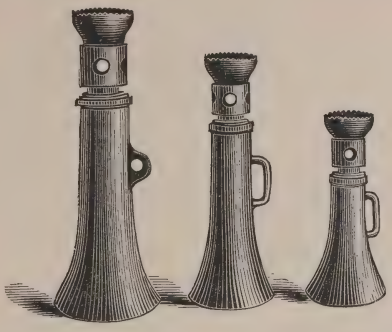
Pinch Point.

Steel Pointed, Wedge or Pinch Point	per lb	$5\frac{1}{2}$	cents
Solid Steel " " "	"	8	"

BEST REFINED BORAX.

In 25 lb Boxes	per lb	20	cents

LOCOMOTIVE JACK SCREWS.



MADE WITH WROUGHT IRON SCREWS, CAST STANDARD AND SWIVEL TOP.

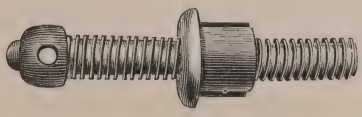
PRICE LIST.

Diameter of Screws.	LENGTH OF IRON BARREL.								
	6 in	8 in	10 in	12 in	14 in	16 in	18 in	20 in	24 in
1½ inches..	$4 00	$4 75	$5 00	$5 50	$6 00	.....	.....	.....	.....
1¾ " ..	4 50	5 00	5 50	6 00	6 50	$8 00	.....	.....	.....
2 " ..	5 50	5 75	6 50	7 75	8 00	9 50	$10 00	$10 50	$13 50
2¼ " ..	.....	8 75	9 50	10 00	10 50	12 00	12 75	13 50	16 00
2½ " ..	.....	10 00	10 75	11 50	12 00	12 75	13 75	14 75	17 50

Discount.....per cent.

CAST IRON JACK SCREWS.

WITH NUT TO LET INTO WOOD BLOCK.



Length of Thread, 20 inches. Diameter of Thread, 3 inches.....$4 00

PAINT MILLS.

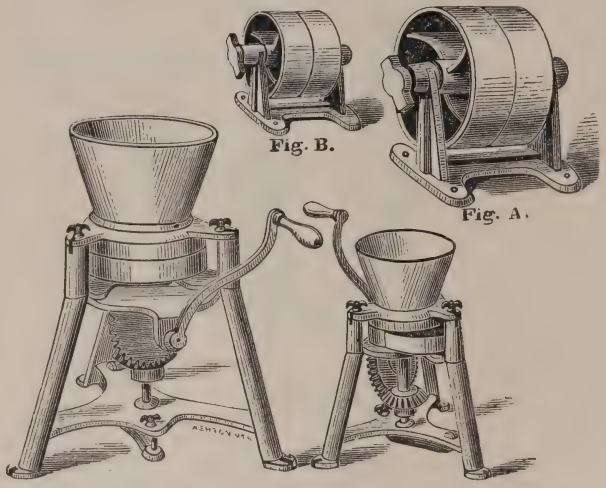


Fig. B.

Fig. A.

No. 4 Small Hand Mill	each	$5 00
" 3 Medium Hand Mill	"	6 50
" 2 Large Hand Mill	"	8 00
" 1 Power Mill	without Pulley, "	35 00
" 0 Mammoth Power Mill	" " "	40 00

SAND PAPER.

Nos. 00 to 1½	per ream	$4 75
No. 2	"	5 25
" 2½	"	5 25
" 3	"	5 25

ROLL SAND PAPER.—50 *Yards Each.*

Nos. 00 to 1½, 23½ inches wide	per roll	$5 00
No. 2, 23½ inches wide	"	5 50
" 2½, 23½ "	"	6 00
" 3, 23½ "	"	6 50
" 3½, 23½ "	"	7 50
" 4, 23½ "	"	8 50
" 3, 30 "	"	13 00

GROUND QUARTZ.

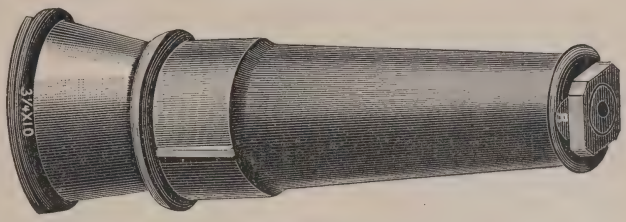
All Numbers	per lb	3½ cents

BEST IRISH GLUE.

In Bulk or put up in 5 lb Boxes	per lb	25 cents

SEAMLESS THIMBLE SKEINS.

Our Own Manufacture.



STANDARD PRICE LIST.

D. V. & Co., Pattern.

2⅛ x 6½	inch	per set	$3 75	3½ x 10	inch	per set	$8 00
2¼ x 7	"	"	3 75	3½ x 11	"	"	8 00
2¼ x 7½	"	"	4 25	3½ x 12	"	"	8 05
2⅜ x 7	"	"	3 90	3¾ x 11	"	"	8 25
2½ x 7½	"	"	4 50	3¾ x 12	"	"	8 60
2½ x 8	"	"	4 60	4 x 12	"	"	9 75
2¾ x 8	"	"	4 90	4¼ x 12	"	"	15 00
2¾ x 8½	"	"	4 90	4½ x 12	"	"	16 00
3 x 9	"	"	6 00	4½ x 13	"	"	18 00
3¼ x 10	"	"	7 50	5 x 13	"	"	21 00
3¼ x 11	"	"	8 00	5 x 14	"	"	22 00

Discount.....per cent.

EXTRA HEAVY PATTERN.

Sizes in Stock.

3 x 9	inch	per set	$6 00	3½ x 11	inch	per set	$8 00
3¼ x 10	"	"	7 50	3¾ x 11	"	"	8 25

Discount.....per cent.

We use a superior quality of Iron, and great care in casting, and our patterns all being new, produce a very fine quality of Skeins. We adopt the D. V. & Co. pattern for our merchant trade, but are prepared to make *Seamless Skeins* of any desired pattern or weight, and to make them with name of any wagon manufacturer on them if required. We invite correspondence for special orders, and will make extremely close figures on large contracts.

THIMBLE SKEIN PARTS.

THIMBLE SKEINS WITHOUT BOXES.

Size.	Per Set.	Size.	Per Set.	Size.	Per Set.
2⅛ x 6½	$2 50	3 x 9	$4 00	3¾ x 12	$5 75
2¼ x 7	2 50	3¼ x 10	5 00	4 x 12	6 50
2¼ x 7½	2 85	3¼ x 11	5 35	4¼ x 12	10 00
2⅜ x 7	2 60	3½ x 10	5 35	4½ x 12	10 75
2½ x 8	3 10	3½ x 11	5 35	4½ x 13	12 00
2¾ x 8	3 30	3½ x 12	5 40	5 x 13	14 00
2¾ x 8½	3 30	3¾ x 11	5 50	5 x 14	14 75

Discount.....per cent.

THIMBLE SKEIN BOXES.

Size.	Per Set.	Size.	Fer Set.	Size.	Per Set.
2⅛ x 6½	$1 25	3 x 9	$2 00	3¾ x 12	$2 90
2¼ x 7	1 25	3¼ x 10	2 50	4 x 12	3 25
2¼ x 7½	1 45	3¼ x 11	2 70	4¼ x 12	5 00
2⅜ x 7	1 30	3½ x 10	2 70	4½ x 12	5 40
2½ x 8	1 55	3½ x 11	2 70	4½ x 13	6 00
2¾ x 8	1 65	3½ x 12	2 75	5 x 13	7 00
2¾ x 8½	1 65	3¾ x 11	2 75	5 x 14	7 40

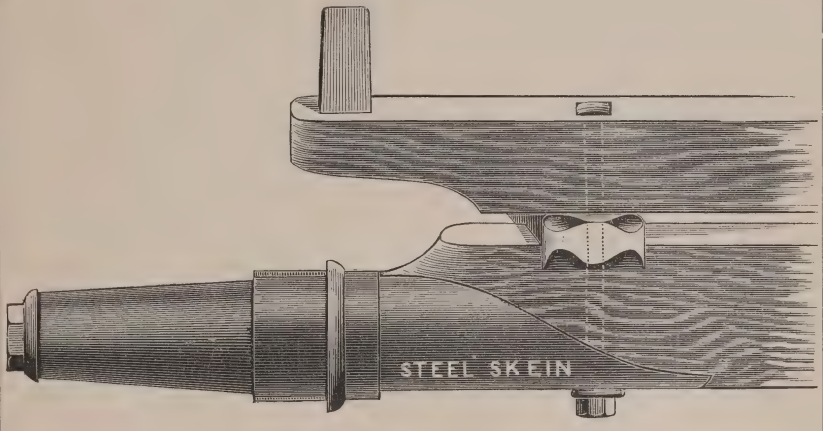
Discount.....per cent.

THIMBLE SKEIN NUTS.

Size.	Per Set.	Size.	Per Set.	Size.	Per Set.
2⅛ x 6½	$1 00	3 x 9	$1 90	3¾ x 12	$2 10
2¼ x 7	1 00	3¼ x 10	1 90	4 x 12	3 10
2¼ x 7½	1 00	3¼ x 11	1 90	4¼ x 12	3 10
2⅜ x 7	1 00	3½ x 10	1 90	4½ x 12	3 75
2½ x 8	1 00	3½ x 11	1 90	4½ x 13	3 75
2¾ x 8	1 10	3½ x 12	1 90	5 x 13	4 00
2¾ x 8½	1 10	3¾ x 11	2 10	5 x 14	4 00

Discount.....per cent.

STEEL THIMBLE SKEINS.



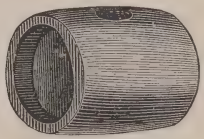
PRICE LIST.

2¾ by 8½	per set	$7 00	3¾ by 12	per set	$11 00
3 by 9	"	8 00	4 by 12	"	12 50
3¼ by 10	"	9 00	4¼ by 12	"	15 00
3½ by 11	"	10 00	4½ by 13	"	17 50

Discount.....per cent.

CAST IRON POST MAULS.

No. 1 Iron Face.



No. 2 Wood Face.

Price, all sizes,.....per pound 3½ cents

CAST IRON BOB SLED SHOES.

Price, all sizes.....per pound 3½ cents

FILES AND RASPS.

Standard U. S. List.

MILL-SAW, ROUND, AND SQUARE.

Inch.	Bastard	2d Cut	Smooth
4	$1 40	$1 65	$1 75
5	1 60	1 85	2 00
6	1 85	2 10	2 35
7	2 20	2 55	2 80
8	2 65	3 05	3 30
9	3 15	3 65	3 95
10	3 80	4 35	4 75
11	4 50	5 20	5 60
12	5 35	6 15	6 70
13	6 40	7 35	8 00
14	7 65	8 75	9 55
15	9 10	10 50	11 40
16	10 80	12 40	13 50
17	12 60	14 55	15 75
18	14 70	16 90	18 40

FLAT AND WARDING.

Inch	Bastard	2d Cut	Smooth
4	$1 50	$1 75	$1 90
5	1 70	2 00	2 15
6	2 00	2 35	2 55
7	2 40	2 80	3 05
8	2 90	3 35	3 65
9	3 50	4 00	4 35
10	4 15	4 75	5 20
11	4 80	5 60	6 05
12	5 80	6 65	7 25
13	6 85	7 90	8 55
14	8 15	9 40	10 20
15	9 75	11 20	12 20
16	11 55	13 30	14 45
17	13 60	15 65	17 00
18	16 00	18 45	20 00

HAND, HALF ROUND, PILLAR, AND THREE SQUARE.

Inch	Bastard	2d Cut	Smooth
4	$1 60	$1 85	$2 00
5	1 85	2 10	2 35
6	2 20	2 55	2 80
7	2 65	3 05	3 30
8	3 15	3 65	3 95
9	3 80	4 35	4 75
10	4 50	5 20	5 60
11	5 25	6 05	6 60
12	6 25	7 20	7 80
13	7 35	8 50	9 20
14	8 75	10 10	10 95
15	10 35	11 90	12 95
16	12 25	14 10	15 35
17	14 55	16 75	18 20
18	17 25	19 90	21 60

WOOD FILES AND RASPS.

Inch	Cabinet Files and Rasps	Hf Rnd Wood Rasps	Flat Wood Rasps
6	$2 90	$2 55	$2 35
7	3 50	3 05	2 80
8	4 20	3 65	3 35
9	5 00	4 35	4 00
10	6 00	5 20	4 75
11	7 00	6 05	5 60
12	8 25	7 20	6 65
13	9 65	8 50	7 90
14	11 30	10 10	9 40
15	13 15	11 90	11 20
16	15 40	14 10	13 30

FLAT WOOD FILES take Flat Bastard Price.
HALF ROUND WOOD FILES take Half Round Bastard Price.

FILES AND RASPS.

SAW FILES.

Inch	Taper Single Cut	Taper Double Cut to Point	Slim Taper Single Cut	Slim Taper Double Cut to Point	Pit Saw Blunt Single Cut	Band Saw Taper Single Cut	Gin Saw Taper Single Cut	Hook Tooth Blunt Single Cut
3	$1 05	$1 35	$1 15	$1 45	$1 50	$1 70	$1 60	.....
3½	1 05	1 35	1 15	1 45	1 50	1 70	1 60	.....
4	1 20	1 50	1 25	1 55	1 60	1 85	1 75	.....
4½	1 35	1 75	1 40	1 75	1 70	2 05	1 95	.....
5	1 60	2 00	1 55	1 95	1 85	2 35	2 10	.....
5½	1 85	2 35	1 75	2 20	2 10	2 65	2 30	.....
6	2 15	2 75	2 05	2 55	2 45	3 00	2 45	$2 65
7	2 75	3 45	2 45	3 10	3 15	3 70	2 80	3 15
8	3 45	4 30	3 00	3 75	3 95	4 50	3 15	3 80
9	4 30	5 40	3 65	4 55	4 80	.....	.....	4 50
10	5 35	6 70	4 50	5 60	5 80	.....	.....	5 25
11	6 60	8 25	5 55	6 90	6 85	.....	.....	6 15
12	8 00	10 00	6 85	8 55	8 00	.....	.....	7 10
13	9 55	11 95	8 40	10 50	.....	.....	.....	.....
14	11 30	14 15	10 35	12 90	.....	.....	.....	.....

One Round Edge advances 7½ *per cent.* and *Two Round Edges* advances 15 *per cent.* on respective kinds and cuts.

Dead Smooth, double price of Bastard cut.

Sizes below 4 *inches* not extended take price of 4 inch; and ½ *inches not specified* take next higher full inch price.

HORSE RASPS.

Length.....	10	12	14	15	16 inch
Plain	$4 65	$6 30	$9 00	$10 80	12 80 per doz
Beveled.....	5 35	7 55	10 80	12 80	15 00 per doz
Tanged.....	6 30	9 00	12 80	15 00	17 60 per doz

HELLER'S HORSE RASPS.

Length.....	10	12	14	15	16 inch
Plain	$4 65	$6 30	$9 00	$10 80	$12 80 per doz
Beveled.....	5 35	7 55	10 80	12 80	15 00 per doz
Tanged	6 30	9 00	12 80	15 00	17 60 per doz

CARRIAGE AXLE WASHERS.

PRICE PER 100.

Size Axle.....	¾	⅞	1	1⅛	1¼	1⅜	1½
Half Patent Nut	$1 50	$1 50	$1 75	$1 75	$2 00	$2 12	$2 25
Half Pat. Collar	1 50	1 75	2 00	2 00	2 25	2 37	2 50
Taper Nut.....	1 50	1 50	1 75	1 75	2 00	2 12	2 25
Taper Collar...	1 50	1 75	2 00	2 00	2 25	2 37	2 50

EXCELSIOR.

Coarse, Medium and Fine.....per 100 lbs $1 75

CORDAGE.

American Lath Yarn.....Tarred, per lb .....
Sisal Lath Yarn.....Light Tarred, " .....
Hide Rope..... " .....

BABBITT METAL.

No. C, good quality.....per lb .....
No. B, extra quality..... " .....
No. A 1, extra fine quality..... " .....

HAMMERED IRON AXLES.

Standard List.

Half Patent Solid Collar.

Swelled Taper Solid Collar.

No. 1, Common Taper Axle, Loose Collar.....per lb 10 cents
No. 2, " " " Solid " ..... " 12 "
No. 5, Concord Axles, Loose Collar..... " 14 "
No. 6, " " Solid " ..... " 16 "

EXTRA REFINED HAMMERED IRON AXLES.

Solid Collar.—Swelled Shoulder.

No.	Swell Shoulder	¾ to 1	1⅛	1¼	1⅜	1½	1⅝	1¾	2	2¼
11	Half Patent Long Bed.	$5 50	$6 50	$8 00	$10 25	$12 75	$15 50	$18 50	$25 00	$33 00
12	" " Short Bed.	4 25	5 00	6 00	8 00	10 25	13 00	16 00	22 00	26 00
13	Swelled Taper Long Bed	5 50	6 50	8 00	10 25	12 75	15 50	18 50	25 00	33 00
14	" " Short Bed	4 25	5 00	6 00	8 00	10 25	13 00	16 00	22 00	26 00

EXTRA QUALITY REFINED IRON AXLES.

Steel Converted.—Extra Finish.

No.	Steel Converted.	¾ to 1	1⅛	1¼	1⅜	1½
11½	Half Patent Long Bed ...	$7 25	$8 45	$10 10	$13 10	$15 75
12½	" " Short Bed...	6 00	6 85	7 90	10 75	13 10
13½	Swelled Taper Long Bed.	7 25	8 45	10 10	13 10	15 75
14½	" " Short Bed.	6 00	6 85	7 90	10 75	13 10

Extras.—*For Coach Beds,* ⅞ to 1¼, 15 cents net. 1⅜ to 1½, 30 cents net. Larger than 1½ $1 00 per set net.

For Fan Tails, ⅞ to 1¼, 10 cents net. 1⅜ to 2, 20 cents per set net.

EXTRA QUALITY STEEL AXLES.

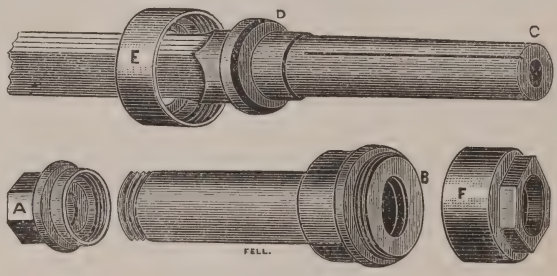
PRICE LIST.

Nos.	Swell Shoulder.	⅝ to ¾	⅞	1	1⅛	1¼	1⅜	1½
19	Half Patent Long Bed	$9 00	$9 50	$10 50	$13 50	$17 00	$21 00	$23 00
20	" " Short "	7 00	7 50	8 00	9 00	12 50	16 50	19 00
21	Swelled Taper L'ng "	9 00	9 50	10 50	13 50	17 00	21 00	23 00
22	" " Sh'rt "	7 00	7 50	8 00	9 00	12 50	16 50	19 00

AXLE BOXES.

Size Axle.....	⅞ & 1	1⅛	1¼	1⅜	1½	1⅝	1¾	2 inch
Half Patent or Taper	75	90	$1 10	$1 35	$1 60			per set

KRITCH'S SELF LUBRICATING AXLE.



PRICE LIST.

Nos.....	A	B	C	D	E	F	G
Size Axle.....	¾	⅞	1	1⅛	1¼	1⅜	1½ in.
Long Beds, per set	$8 00	$9 00	$10 00	$12 50	$15 75	$19 00	$24 00
Short Beds, per set	$6 00	$7 00	$8 00	$10 00	$13 00	$17 00	$22 00

Please pay particular attention to the following instructions:

1. Before welding the Axles, see that the nuts are slipped on the axle-beds.

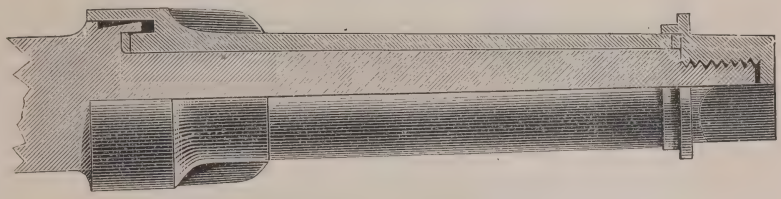
2. Clean out the axle-box well, and also the hole in the spindle, and wipe the spindle clean before oiling.

3. With each set of Axles we send a box of "Dixon's American Graphite Everlasting Axle Grease," to which add castor oil. Put about a tablespoonful of this mixture in each Axle box.

4. Oil the washers a little, and notice that one goes in front and one back of the Axle Collar.

MILLER'S PATENT AXLES.

Steel Converted.

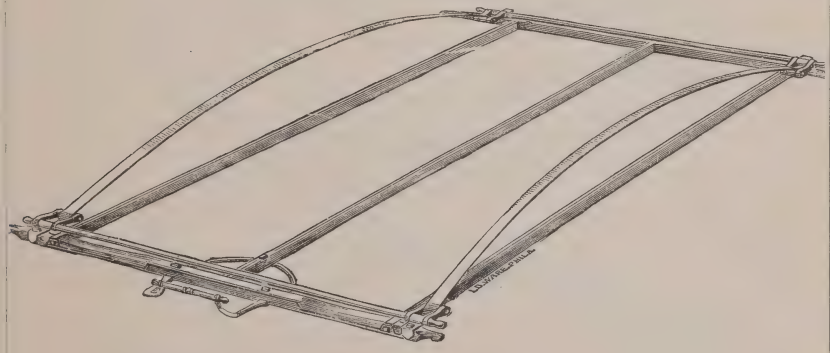


PRICE PER SET.

Sizes.....	¾ to 1	1⅛	1¼	1⅜	1½	1⅝	1¾	2
Long Beds	$5 50	$6 30	$7 70	$10 35	$13 15	$16 60	$20 00	$25 00
Short Beds	4 55	5 35	6 15	8 20	10 35	12 85	15 35	19 40

PATENT CONNECTING RODS.

For Side Springs.

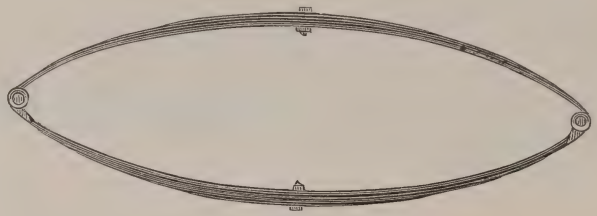


PRICES PER SET.

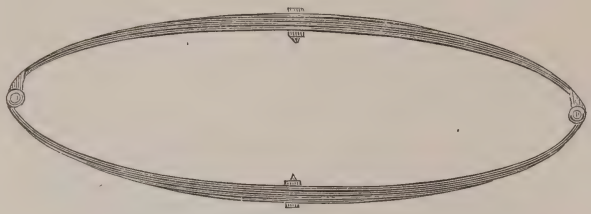
⅝ inch Rods.....For One Seat Buggies $1 00
¾ inch Rods.....For Larger Vehicles.. 1 25
½ inch Steel Rods.....For Light Work..... 1 25

WAGON AND CARRIAGE SPRINGS.

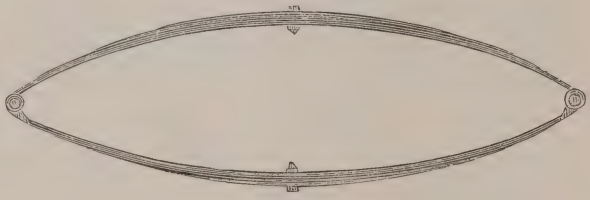
Descriptive Cuts of Various Shapes.



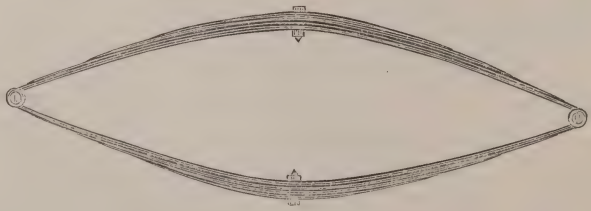
No. 1, Elliptic.



No. 2, French Elliptic. French Head.

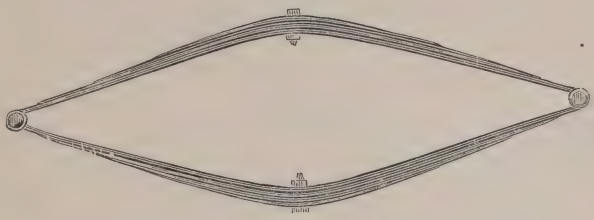


No. 4, Full Elliptic. French Head.

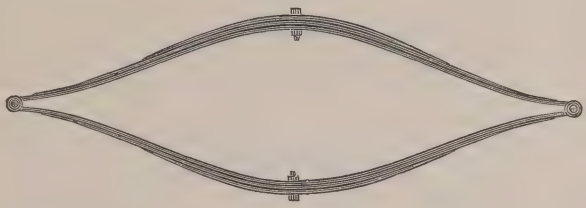


No. 5, Full Elliptic. Button Head.

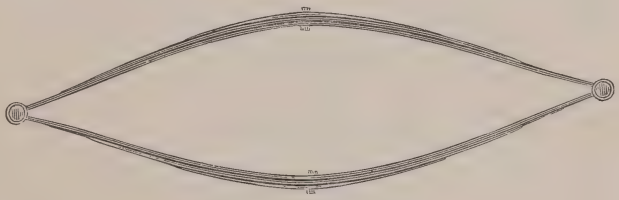
DESCRIPTIVE CUTS OF SPRINGS.—Continued.



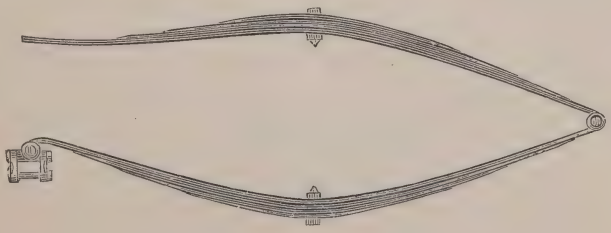
No. 6, Philadelphia Elliptic. Button Head.



No. 7, Double Sweep. English Head.

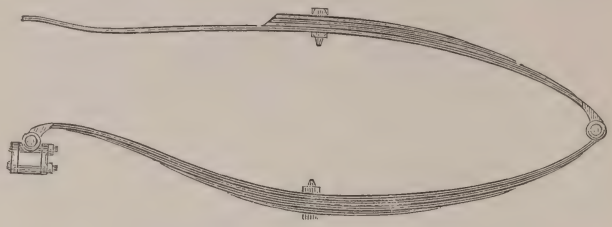


No. 8, Full Elliptic. English Head.



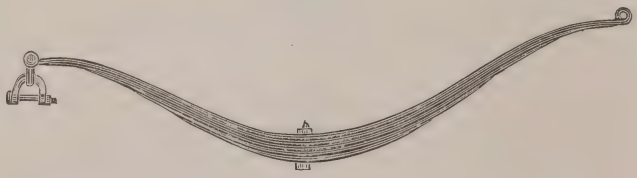
No. 10, Coach Platform Spring.

DESCRIPTIVE CUTS OF SPRINGS.—Continued.



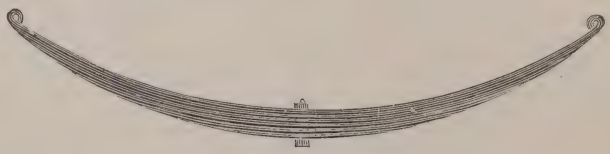
No. 11, Coach Platform Spring.

No. 12, Coach Platform Cross Spring.



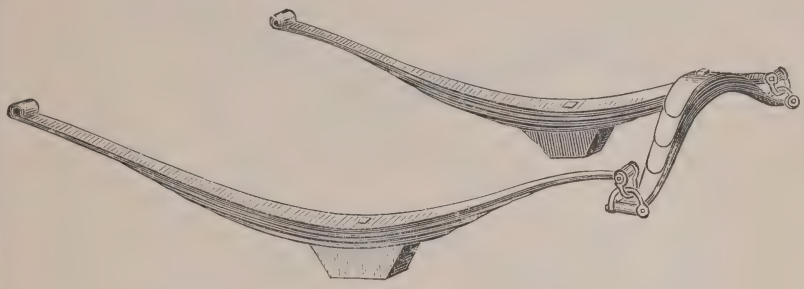
No. 15, Scroll Head Side Spring. Hole out of Center.

No. 16, Scroll Head Cross Spring. Hole in Center.

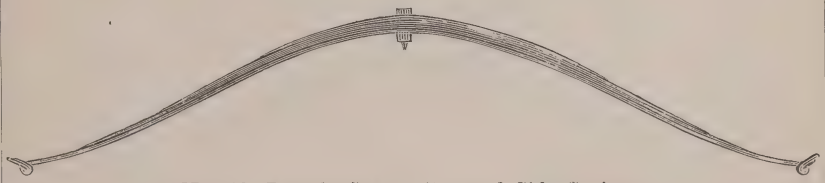


No. 22, Dray Spring.

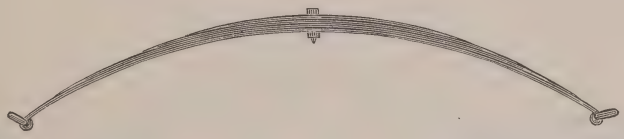
DESCRIPTIVE CUTS OF SPRINGS.—Continued.



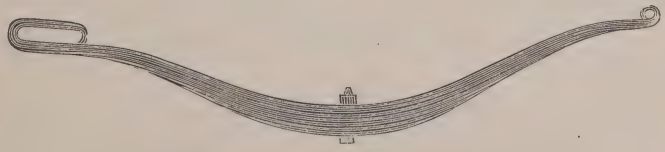
No. 17, Platform Springs Put Together.



No. 18, Double Sweep Concord Side Springs.

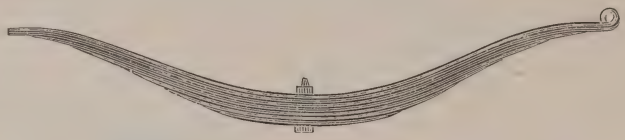


No. 19, Single Sweep Concord Side Springs.

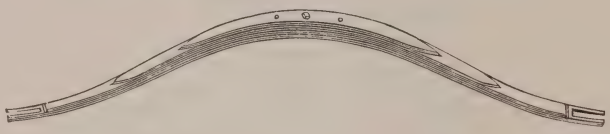


No. 20, Loop End Truck Spring.

DESCRIPTIVE CUTS OF SPRINGS.—Continued.

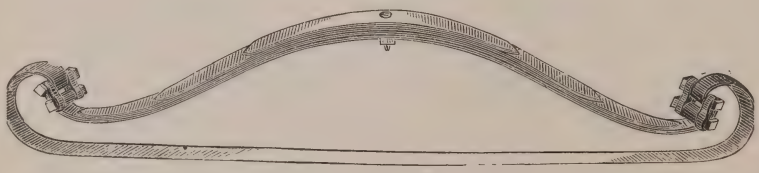


No. 21, Straight End Truck Spring.



No. 23, Half or Bolster Spring.

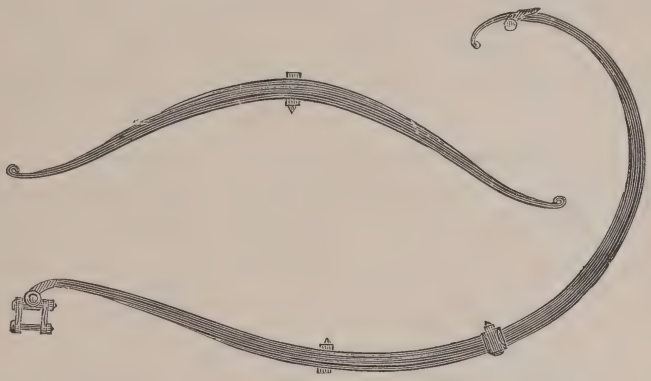
No. 26 Half Scroll Spring. Button Head.



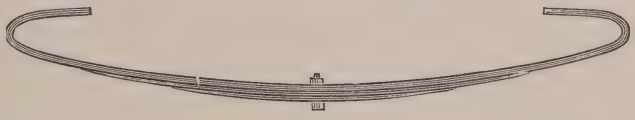
No. 27, Half Scroll Springs with Loops.

No. 25 Side Bar Spring.

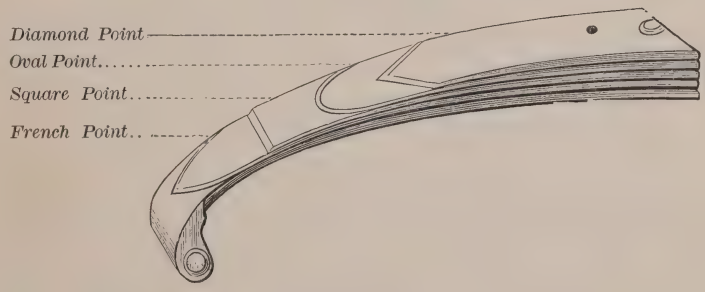
DESCRIPTIVE CUTS OF SPRINGS.—Continued.



No. 30, Phaeton Springs, with Cross Spring.



No. 24, Side Bar Spring.



Showing Different Styles of Points.

STANDARD PRICE LIST OF SPRINGS.

ELLIPTIC, CONCORD, PLATFORM AND HALF SCROLL.

TEMPERED, TESTED AND WARRANTED.

Black, 1¼ and 1⅜ inch..per lb	19 cents	Black, 1½ inch and wider per lb	18 cents
Bright, 1¼ and 1⅜ " "	20 "	Bright, 1½ " " "	19 "

OIL TEMPERED, TESTED AND WARRANTED.

Black, 1¼ and 1⅜ inch..per lb	21 cents	Black, 1½ inch and wider per lb	20 cents
Bright, 1¼ and 1⅜ " "	22 "	Bright, 1½ " " "	21 "

Swedes Steel Springs	4	cents	per lb	extra, to list
Cast Steel Springs	5	"	"	" "
French Scroll and Platform Coach	5	"	"	" "
Springs, 3 and 4 leaf, 28 to 30 inches long	4	"	"	" "
" 3 " 4 " 31 to 33 " "	3	"	"	" "
" 1⅛ inches wide, 3 and 4 leaf	2	"	"	" "
" graded to and including No. 5 Steel	4	"	"	" "
" with riveted plates	20	"	per rivet	" "

Shackles put on all Platform Springs unless ordered to the contrary.

SIDE BAR SPRINGS.

ENGLISH STEEL.—OIL TEMPER.

1¼ inch, 2 plates	per pair	$3 00
1¼ inch, 3 "	"	3 50

CAST STEEL.—OIL TEMPER.

1¼ inch, 2 plates	per pair	$3 50
1¼ inch, 3 "	"	4 25

PHAETON AND COACH C SPRINGS.

CAST STEEL.—OIL TEMPER.

Phaeton C Springs, with Cross Spring, 2 plates	per set	$14 00
" " " " 3 "	"	18 00
" " " " 4 "	"	22 00
Coach C Springs, 3 plates	"	20 00
" " 4 "	"	24 00
" " 5 "	"	28 00
" " 6 "	"	32 00

In ordering C Springs, please send drawing of style and shape desired.

CAST STEEL TWO PLATE SPRINGS.

PRICE LIST.

Letter A	1¼	inches wide,	2	leaf,	34	inches long,	9	inches open	...	Price per pair	$7	00
" B	1¼	"	2	"	34	"	9	"	"	"	6	85
" C	1¼	"	2	"	34	"	9	"	"	"	6	70
" D	1¼	"	2	"	32	"	8½	"	"	"	6	55
" E	1¼	"	2	"	32	"	8½	"	"	"	6	40
" H	1¼	"	2	"	32	"	8½	"	"	"	6	25
" J	1¼	"	2	"	32	"	8½	"	"	"	6	10

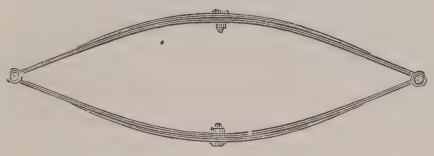
For Heavy Top Buggy.....	use one	letter B	Spring	front..	one	letter A	Spring	back	
" Light Top Buggy.....	" one	" C	"	"	one	" B	"	"	
" Heavy no Top Buggy..	" one	" D	"	"	one	" C	"	"	
" Medium no Top Buggy	" one	" H	"	"	one	" E	"	"	
" Light no Top Buggy...	" one	" J	"	"	one	" H	"	"	
" Heavy Top Phaeton...	" one	" A	"	"	two	" E	"	"	
" Medium Top Phaeton..	" one	" B	"	"	two	" H	"	"	
" Light no Top Phaeton.	" one	" C	"	"	two	" J	"	"	

BRIGHT SULKY SPRINGS.—*Button Heads.*

PRICE LIST.

1¼	inch,	2	plates,	30	inches	long.....	per pair	$6	25
1¼	"	2	"	32	"	"	"	6	25
1¼	"	2	"	34	"	"	"	6	25
1½	"	2	"	32	"	"	"	6	50
1½	"	2	"	34	"	"	"	6	50

OIL TEMPERED SEAT SPRINGS.

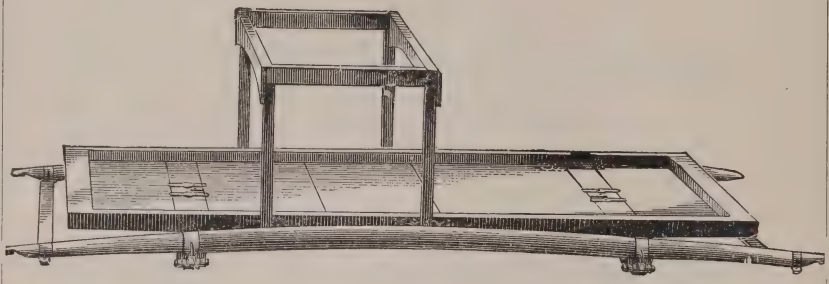


PRICE LIST.

1¼	inch,	2	plates,	24	inches	long.....	per pair	$	85
1⅜	"	2	"	25	"	"	"		92
1½	"	2	"	26	"	"	"	1	00
1½	"	2	"	28	"	"	"	1	18
1¼	"	3	"	29	"	"	"	1	35
1⅜	"	3	"	29	"	"	"	1	50
1½	"	3	"	29	"	"	"	1	70

BREWSTER SIDE BAR GEAR.

No. 0½.



No. 0½ includes Second Growth Side Bars, two end and two cross Springs (oil tempered), clipped on with best Norway Iron Clips and Skeleton Body attached.

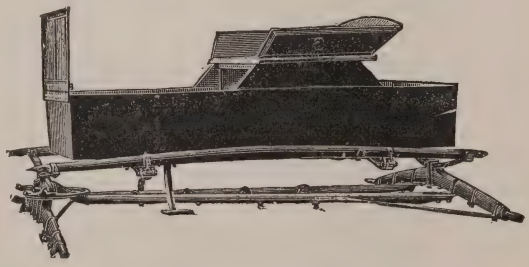
Price, $11 00.

No. 1½ is a complete Gearing, Ironed, Steel Axles, Oil Tempered Springs, with Skeleton Body and Seat Frame, same as Part No. 0½.

Price, $28 00.

BREWSTER SIDE BAR.

No. 2.—*Not Painted.*



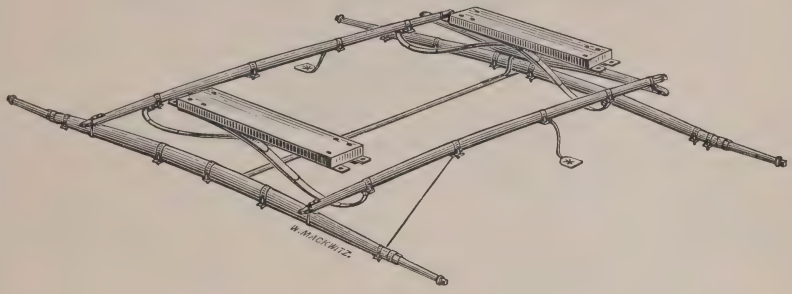
Part No. 1 includes second growth Side Bars, with two End and two Cross Springs, (oil tempered,) clipped on and Body attached, with Seat, Toe Rail and Leather Dash.

Price, $17 00.

Part No. 2 includes Part No. 1 set on a complete Gearing, with Steel Axles, Steps attached to Body, in fact. a complete Open Buggy, except Wheels, Shafts and Trimmings.

Price $35 00.

TIMKEN PATENT SPRING AND GEAR.

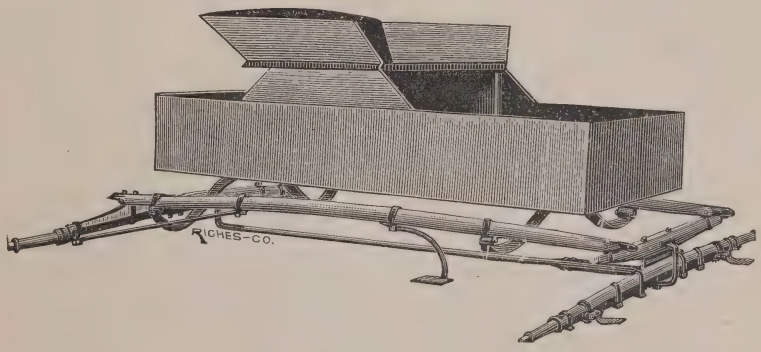


No. 1	Gear, For Light Top or No Top Buggy	.....	$28 00
" 2	" " Buggy with or without Top	.....	28 00
" 2½	" " White Chapel Body	.....	28 00
" 3	" " Two Seated Wagon	.....	32 00
" 4	" " Two Seated Surrey Wagon	.....	32 00

All Axles are now set off for a Plumb Spoke.—Four inches difference in height of Wheels.

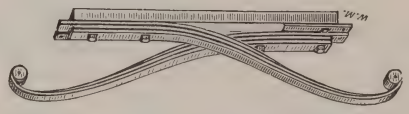
TIMKEN PATENT GEARS WITH BODIES.

With Leather Dash.



No. 1	Gear, with Piano Body, ⅞ or ⅞ inch Axle	.....	$35 00
" 2	" " " " ⅞ or 1 " "	.....	35 00
" 2½	" " White Chapel Body, ⅞ or 1 inch Axle	.....	37 00
" 3	" " Two Seat Piano Box, 1 inch Axle	.....	43 00

TIMKEN PATENT SIDE BAR SPRINGS.



PRICE LIST.

Price.	No. of Springs	No. of Plates	Width of Front Springs	Width of Back Springs	WIDTH OF BODY AND SIZE OF VEHICLE.
$7 00	0	2	1⅛	1¼	18 to 21 inches, One man, Road Wagon.
8 00	1	3	1¼	1⅜	22 to 24 " Light Top or no Top Buggy.
9 00	2	3 & 4	1¼	1⅜	24 to 26 " Buggy, with or without Top.
9 00	2½	3 & 4	1¼	1½	24 to 26 " White Chapel Buggy.
12 00	3	4 & 5	1½	1½	26 to 32 " Two seated square box Wagon, with or without Top.
13 00	4	4 & 6	1½	1¾	26 to 32 " Two seated Surrey.

Above prices are for Springs in sets, with Shackles, and includes Royalty.

In ordering, give *Number* of Springs.

No. 2 Springs are now made Three plate 1¼ inch Front, and Four plate 1⅜ inch back.

FITTING UP SPRINGS.

In fitting up springs make front spring-bar same thickness as recess under body. Leave space in bottom of body for back spring-bar to come flush with top of bottom. Leave ⅜ inch space between springs where they cross so they will not rub together. Cut off end of spring to suit width of body and drill hole in end of spring to bolt body fast. Bolt a plate of iron one inch from it to hold bar level. When screwing up shackle bolts leave them loose enough so the spring can work in shackle.

PULLIAM'S PATENT BOLSTER SPRING.

For Farm Wagons.

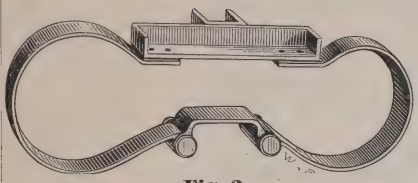


Fig. 2.

Fig. 2 represents a single Bolster Spring of our improved pattern, as we furnish them.

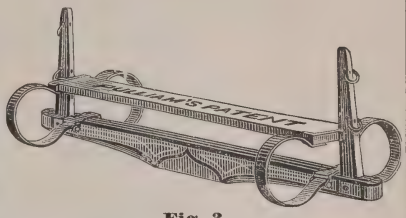


Fig. 3.

Fig. 3 represents the manner in which the Springs should be attached to Wagon Bolsters.

These Springs have been in practical use for over four years, and are a pronounced success.

No Fruit or Vegetable Grower, Peddler, Huckster, Farmer or Teamster can afford to be without them.

PRICES PER SET OF FOUR SPRINGS.

1½	inch	Spring.....	Capacity,	800 to 1000	pounds.....	Weight,	30	pounds	$6 00
1¾	"	.....	"	1500 to 2000	"	"	38	"	6 50
2	"	.....	"	2000 to 2500	"	"	43	"	7 00
2¼	"	.....	"	2500 to 3000	"	"	48	"	7 50

The weight of Driver, Wagon Bed, Seat and Brake must be included when the weight which Springs are to carry is calculated. To obtain greater carrying capacity than our 2¼ inch springs will give we advise four springs behind and four in front, using the 1½ or 1¾ inch Springs.

DIRECTIONS.

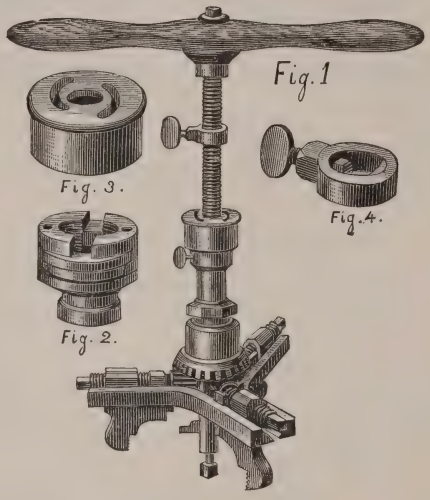
A cross-board should be fitted to the Springs, so as to hold them in proper position, as shown in Fig. 3. The Wagon Box or Bed is to rest on top of cross-boards, *but is not to be fastened;* by so doing, the Springs can be taken off or put on at pleasure. The cross-boards are to be fastened to the Springs by means of the bolts, with the heads counter-sunk in the wood, and nuts drawn up tight on the under side. The boards must be of sufficient thickness, to prevent the Wagon Bed from resting on the Bows of the Spring. *Iron or Wood Cleats must be put on Wagon Bed on each side of rear Bolster Standard* to keep it from sliding. The hole in Malleable Saddle or Yoke, is for the purpose of bolting it, if desired, to the Bolster, so as to more firmly hold the Spring in position.

WARRANTY.

The Springs may be subjected to any fair and reasonable test at time of purchase, and if found defective, new Springs or parts will be furnished at our factory free of charge, provided always, that the defective parts are held subject to our order.

WOODWORKER'S TOOLS AND MACHINES.

SILVERS' HUB BOXING MACHINE.



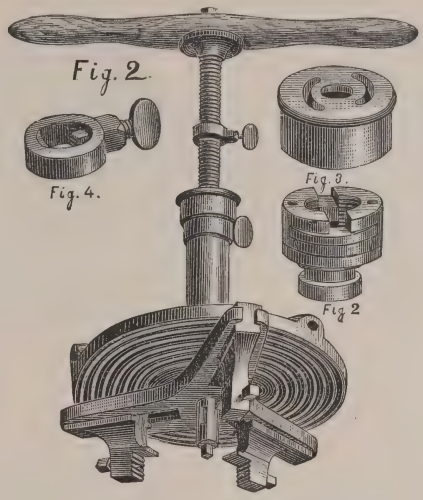
PRICES.

No. 1 Machine	each	$25 00
" 2 "	"	30 00
Extra Mandrel and Bits for No. 1	"	3 00
Bits for No. 1 Machine	per set	75
" " 2 "	"	1 00

The No. 1 Machine will clamp Hubs from 2 to 9½ inches in diameter. The No. 2 Machine which is intended for only very heavy work, will clamp Hubs 9 to 14½ inches in diameter. When ordered, we furnish the No. 1 Machine with an Extra Mandrel, made light at the end and provided with an extra set of small Bits, which renders it suitable for the lightest class of work.

DOLE'S OLD STANDARD HUB BOXING MACHINE.

With Open Adjustable Feed Nut and Gauge Plate.



PRICES WITH SOLID FEED NUT.

No. 1.	For Carriage and Buggy Work	$16 00
" 2.	" Ordinary Carriage Work to Four-Horse Wagon	19 00
" 3.	" Wagon Work of any class	22 00

PRICES WITH OPEN FEED NUT AND GAUGE PLATE.

No. 1.	As described above	$20 00
" 2.	" " "	23 00
" 3.	" " "	27 00

Prices Bits: For No. 1, 60 cents; No. 2, 75 cents; No. 3, 85 cents per set.

WOODWORKER'S FLOAT.

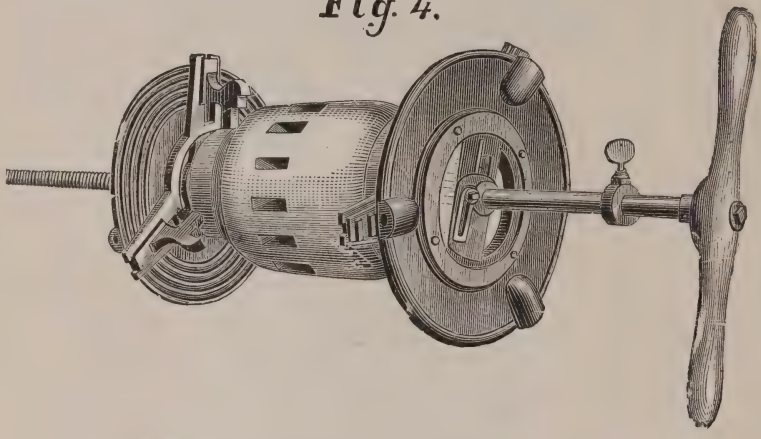
A New and Very Effective Tool.

Price per dozen $12 00

DOUBLE CHUCK TAPER HUB BOXING MACHINE.

SILVERS' PATENT.

Fig. 4.



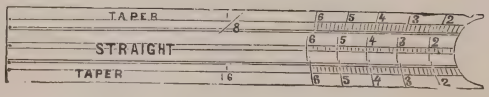
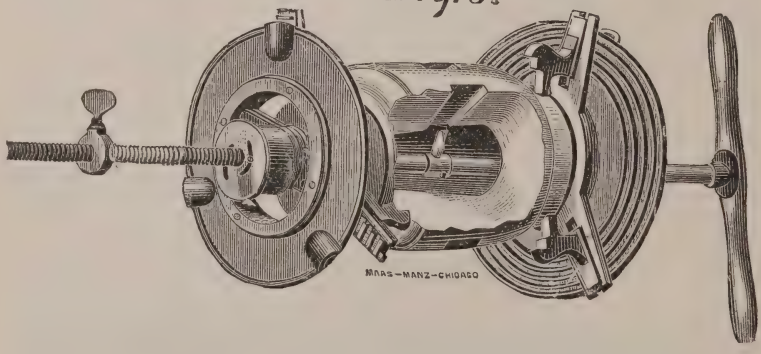


Fig. 5.

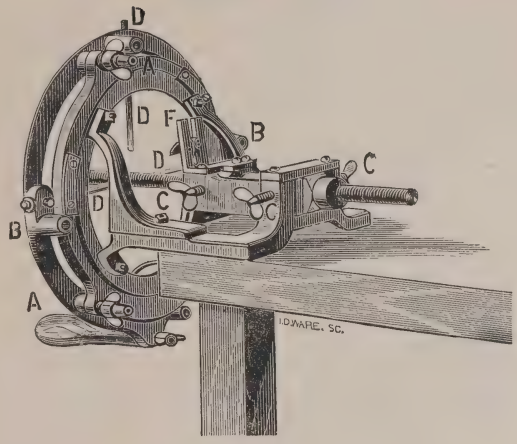


Bores either straight or taper hole. The Adjustable Rule enables the operator to set the bits for cutting either straight or taper hole, as desired. Full directions are sent with each machine.

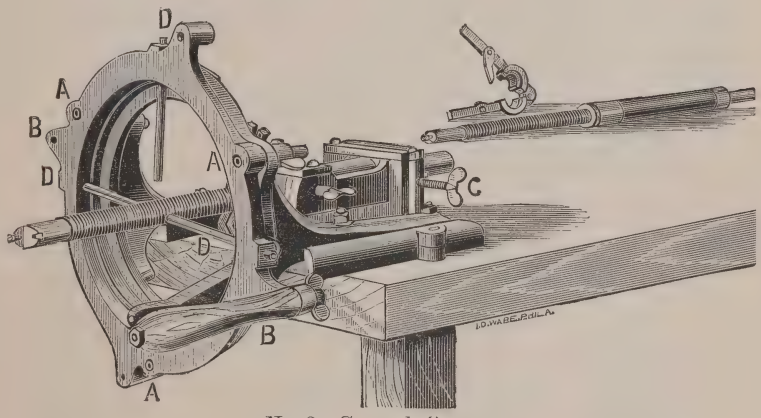
Price, each, $35 00.

LITTLE GIANT HUB BORERS.

ABBOTT'S PATENT.



No. 2, Coach Maker's.



No. 3, General Purpose.

PRICES.

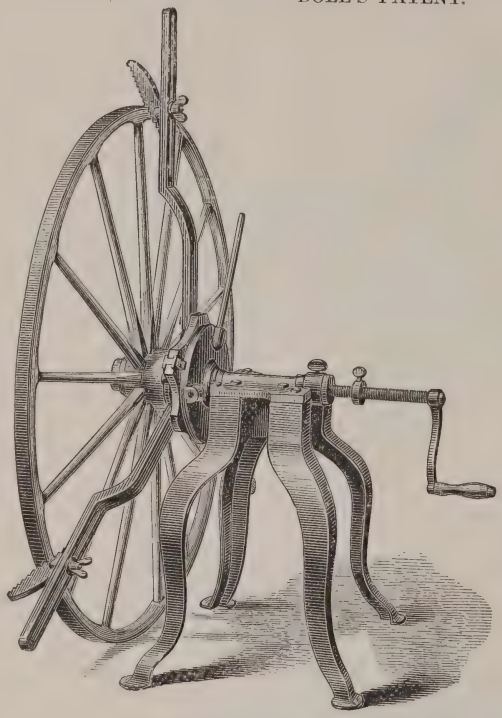
No. 1 Little Giant	each	$28 00
" 2 " "	"	35 00
" 3 " "	"	45 00

Bits 50 cents. Knives 50 cents.

N. B.—We have printed Directions for setting up and operating Little Giant Hub Borer and Axle Puller, which should be sent with each Machine. Should they not come with Machines, write for them.

SELF CENTERING ARM HUB BOXING MACHINE.

DOLE'S PATENT.

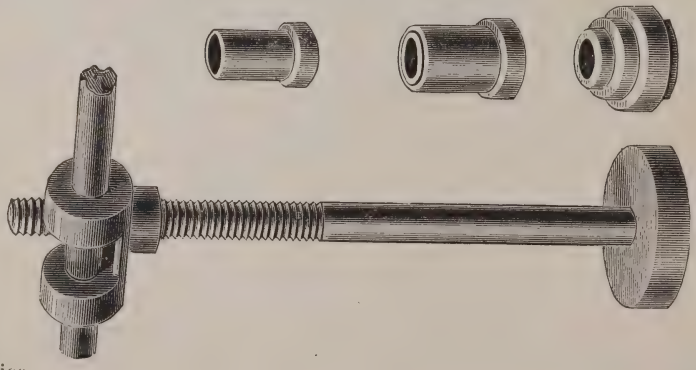


This Machine was brought out to meet a demand from "light carriage builders," for a Machine so constructed that the hole in the hub could be cut with accuracy, at right angles with the rim of the wheel.

This Machine is extensively used by those who prefer driving the box without wedging, and is becoming a favorite for light work. It is substantially made of Iron and fitted with accuracy.

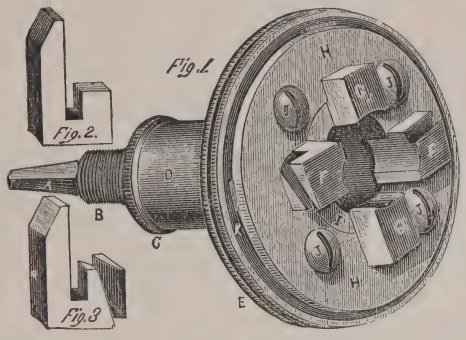
Price, $40 00.

ABBOTT'S BOX PULLER.



Price.....each $6 00

STAR HOLLOW AUGER.



PRICES.

No. 1. Will cut any size tenon from $\frac{7}{16}$ to $\frac{1}{2}$ inch. Price, with adjustable shank..... $7 00

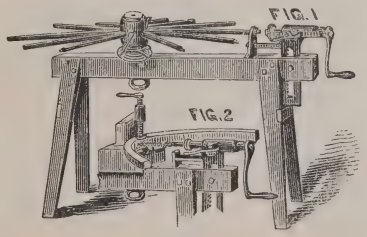
No. 2, Will cut any size tenon from $\frac{5}{8}$ to $1\frac{1}{4}$ inch. Price each.... 13 00

REPAIRS.

CUTTERS.		BLANKS.	
For No. 1 Star...per pair	$1 00	For No. 1 Star, per pair	60 cents
" " 2 " ... "	1 50	" " 2 " "	80 "
" " 1 Dole's. "	1 00	" " 1 Dole's "	60 "
" " 2 " .....each	1 00	" " 2 " ...each	50 "

SPOKE TENONING AND FELLOE BORING MACHINE.

With Star Hollow Auger.



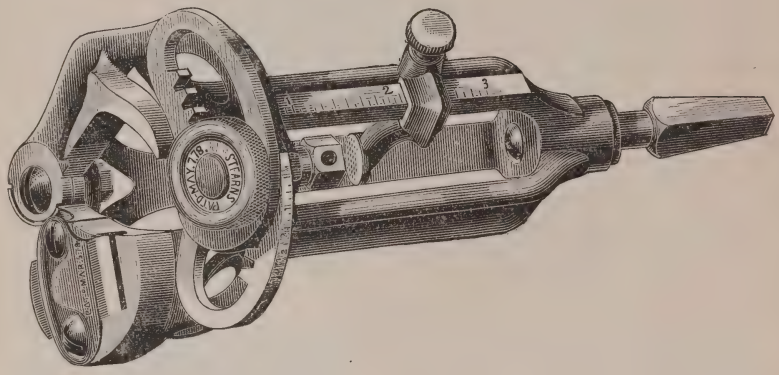
PRICES.

No. 1 Cuts $\frac{7}{16}$ to 1 inch, complete..... $23 00
" 1 Without Felloe Boring Attachment..... 18 00
" 2 Cuts $\frac{5}{8}$ to $1\frac{1}{4}$ inch, complete..... 32 00
" 2 Without Felloe Boring Attachment..... 25 00

N. B.—The Boring Bits are extra, and not included in prices of Machines.

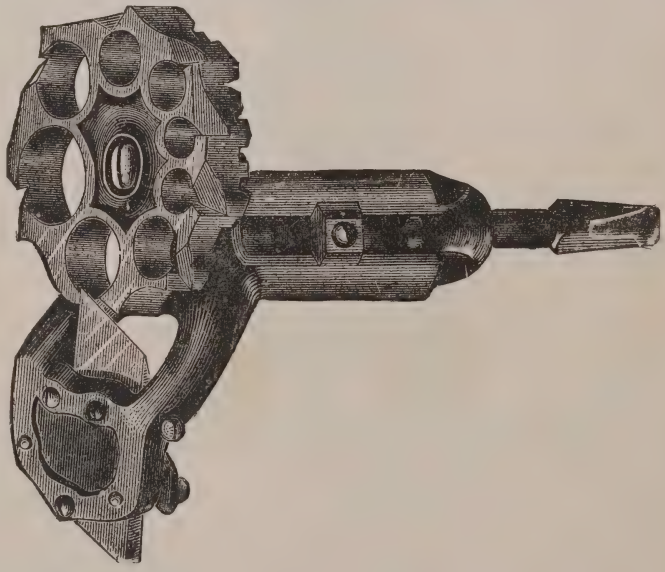
STEARN'S ADJUSTABLE HOLLOW AUGER.

No. 3.

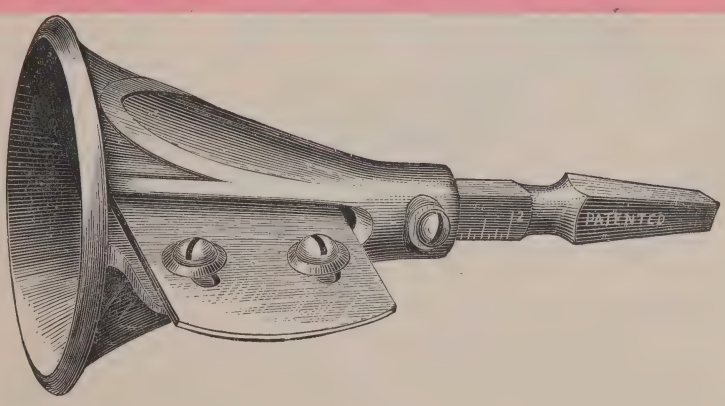


Cuts ⅝ to 1 inch tenon, 3 inches long.....Price $5 00

BONNEY'S ADJUSTABLE HOLLOW AUGER.



Cuts ⅝ to 1 inch tenon.....Price $4 00



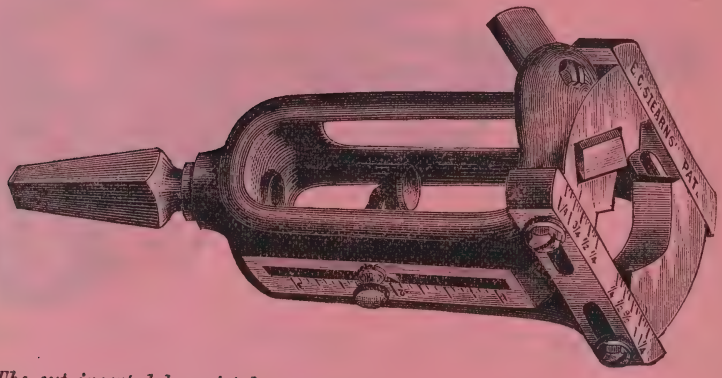
Price, each, No. 1 ..... $ 75
" " " 2 ..... 1 25

ERROR—PAGE 71.

This cut represents

STEARN'S ADJUSTABLE HOLLOW AUGER.

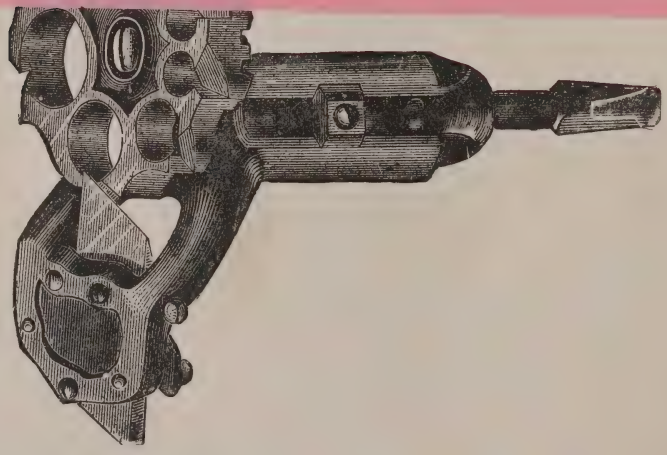
No. 0.



The cut inserted by mistake represents

STEARN'S SINGLE HOLLOW AUGERS.

Size.....	3/8	7/16	1/2	9/16	5/8	3/4	7/8
With Bitts, per dozen,	$12 00	$12 00	$12 00	$14 00	$14 00	$14 00	$16 00



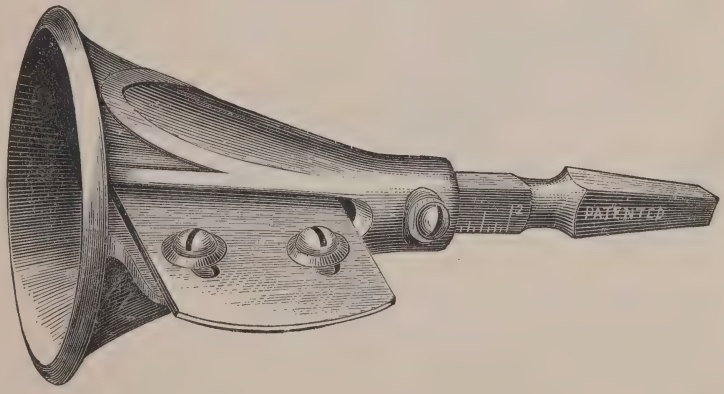
Cuts 5/8 to 1 inch tenon.....Price $4 00

STEARN'S ADJUSTABLE HOLLOW AUGER.

No. 0.

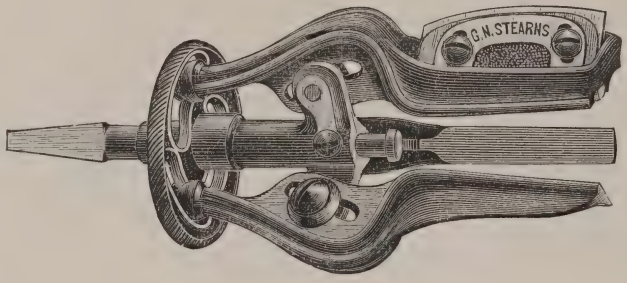
Can be adjusted from ¼ to 1¼ inches.....Price, each $4 00

STEARN'S PATENT SPOKE POINTER.



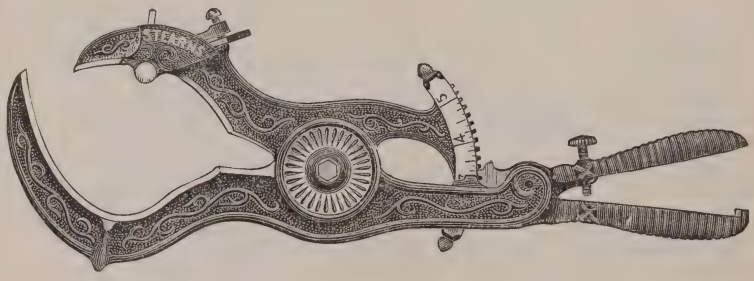
Price, each, No. 1..... $ 75
" " " 2..... 1 25

STEARN'S ADJUSTABLE TAPER AUGER.



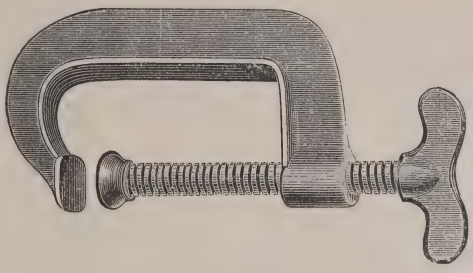
For cutting tenons on Shafts, Poles, Whiffletrees, etc. Price each $3 00

STEARN'S PATENT BAND SETTER.



Price, each $3 25

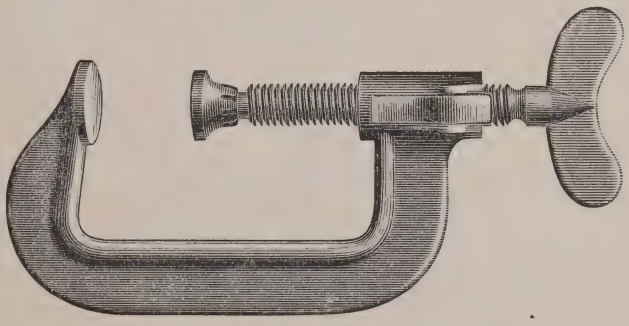
EAGLE SCREW CLAMPS.



The Strongest and Best Clamp Made.

Opens	2	2½	3	4	5	6	7	8	10	inches
Price	$2 00	3 50	4 00	6 00	7 00	8 75	9 75	11 00	13 00	per doz

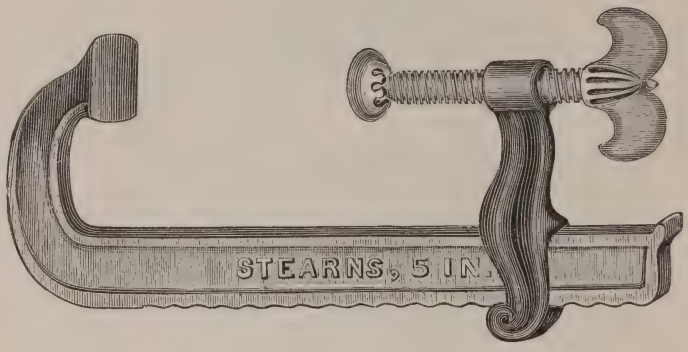
SNOW'S PATENT ADJUSTABLE CLAMPS.



Opens	2	3	4	5	6	7	8	inches
Price	$7 55	8 75	9 75	11 00	14 65	16 45	19 50	per doz

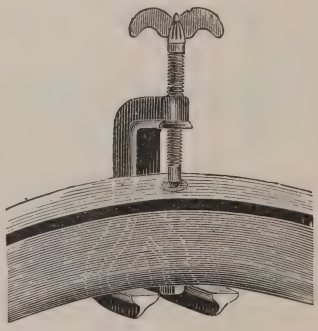
By placing the thumb and forefinger on the levers the Jaws are opened allowing the Screw to move back to any required position without turning, and in same manner the Screw can be moved forward without the use of the thumb and forefinger, as the Screw is cut with a ratchet thread.

STEARN'S ADJUSTABLE SCREW CLAMPS.



Opens	3	5	7	9	12 inches
Price	$4 00	6 50	9 00	10 50	15 00 per doz

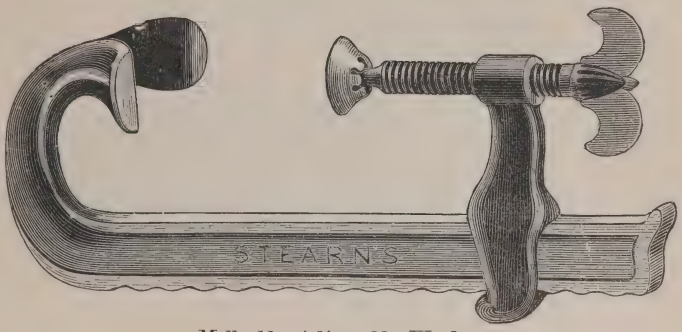
MALLEABLE IRON TIRE BOLT CLAMP.



The above cut is an illustration of our Malleable Iron Tire Bolt Clamp. It is used to hold tire bolts while unscrewing the nuts, thus preserving the bolt. It is built *extra heavy*, has a steel screw with a hardened point, and, having great strength, the blacksmith will find it well adapted to his various uses.

Price, each..... $1 00

STEARN'S PATENT CORNER CLAMP.



Malleable Adjustable Washer.

PRICES.

6 inch opening	per doz	$8 00
9 " "	"	12 00

CARRIAGE MAKER'S EXTENSION CLAMP.

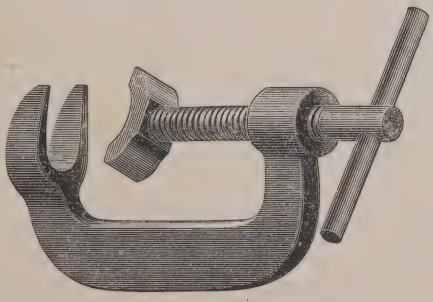
Every Body Maker or Repair Shop should have one.

PRICES.

48 inch opening	each	$2 00
54 " "	"	2 25

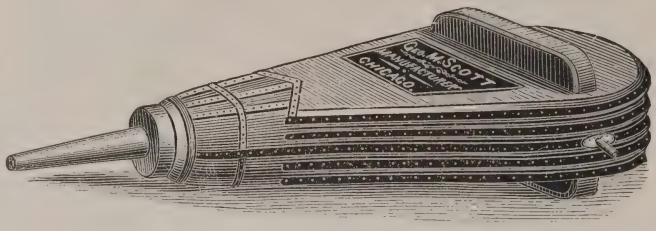
EAGLE SHACKLE CLAMP.

For Putting On Shaft Rubbers.



Price, each $1 00

BLACKSMITH'S BELLOWS.



Standard Hooped.

24 inch	each	$10 00	34 inch	each	$16 00
26 "	"	11 00	36 "	"	18 00
28 "	"	12 00	38 "	"	20 00
30 "	"	13 00	40 "	"	23 00
32 "	"	14 00	42 "	"	27 00

Extra Long Hooped.

24 inch	each	$12 00	38 inch	each	$24 00
26 "	"	13 00	40 "	"	28 00
28 "	"	14 00	42 "	"	34 00
30 "	"	15 00	44 "	"	40 00
32 "	"	17 00	46 "	"	45 00
34 "	"	19 00	48 "	"	50 00
36 "	"	21 00	50 "	"	60 00

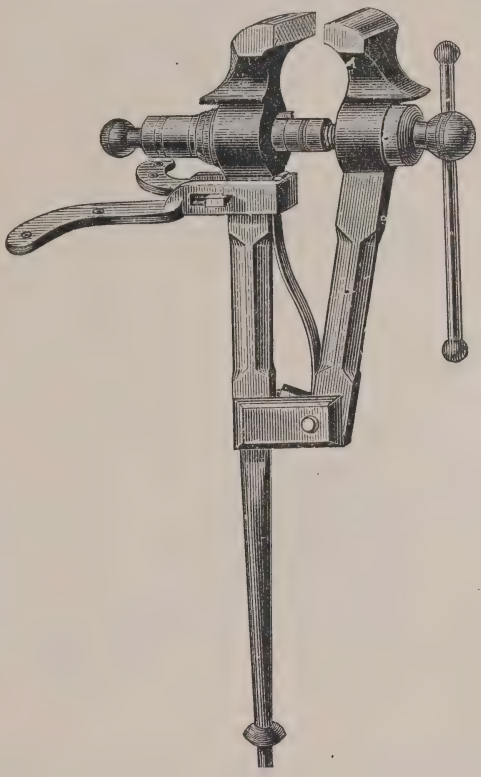
ANVILS.

Peter Wright's.....per lb .....
Armatige..... " .....
Eagle, cast with steel face..... " .....

EAGLE SMALL ANVILS.

No.	00	0	1	2	3	4	5	6	7	8	9	
Weight	4	10	15	20	30	40	50	60	70	80	90	lbs
Price	$2 00	2 75	3 25	4 00	4 50	5 25	6 00	6 50	7 25	8 00	9 00	each

SOLID BOX VISES.

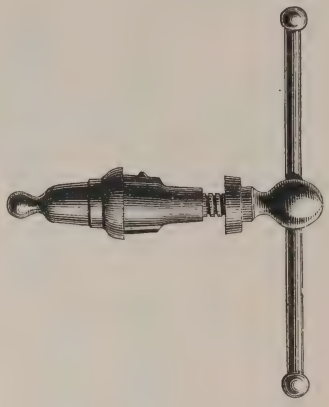


PRICE LIST.

No.	Weight.	Each.	No.	Weight.	Each.
35	About 35 lbs	$8 50	110	About 110 lbs	$24 00
40	" 40 "	9 50	115	" 115 "	25 00
45	" 45 "	10 00	120	" 120 "	26 00
50	" 50 "	11 00	125	" 125 "	27 50
55	" 55 "	12 00	130	" 130 "	29 00
60	" 60 "	13 00	135	" 135 "	31 50
65	" 65 "	14 00	140	" 140 "	33 00
70	" 70 "	15 00	145	" 145 "	35 00
75	" 75 "	16 00	150	" 150 "	36 00
80	" 80 "	17 50	160	" 160 "	41 50
85	" 85 "	18 50	170	" 170 "	44 50
90	" 90 "	20 00	180	" 180 "	47 00
95	" 95 "	21 00	190	" 190 "	53 00
100	" 100 "	22 00	200	" 200 "	56 00
105	" 105 "	23 00	.....	.....	.....

Discount.....per cent.

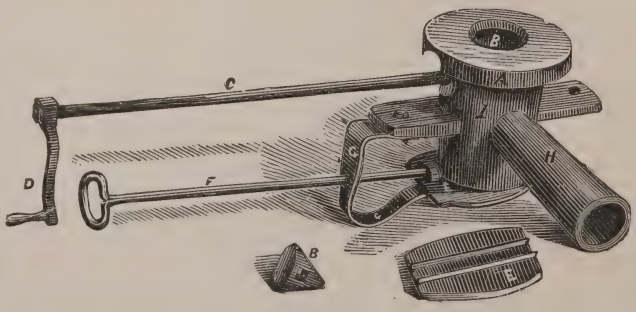
VISE BOXES AND SCREWS.



PRICE LIST.

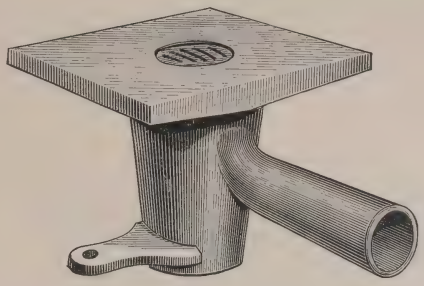
No. 1	For	Vises	weighing	30 to 40 lbs.	each	$3	50
" 2	"	"	"	40 to 60 "	"	4	00
" 3	"	"	"	60 to 85 "	"	4	50
" 4	"	"	"	90 to 130 "	"	6	50
" 5	"	"	"	130 to 200 "	"	8	00

NORTON'S PATENT TWEER IRONS.



Price, each..... $2 50

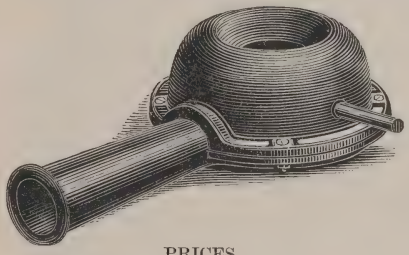
FORT WAYNE TWEER IRON.



We have manufactured this Iron for over fifteen years, and can recommend it as being one of the best and most economical in use.

Price, each	$2 50
Extra Grates, each	25

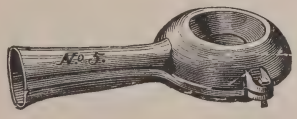
CLARK'S PATENT TWEER IRON.



PRICES.

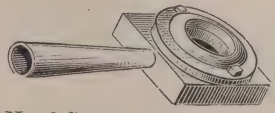
No.	1	2	3	4
Each	$2 00	2 63	3 13	5 00

DUCK'S NEST TWEER IRONS.

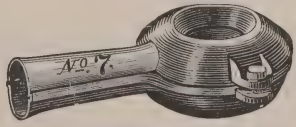


No. 1 Single, each $1 00.

No. 5 Single, each $1 00.

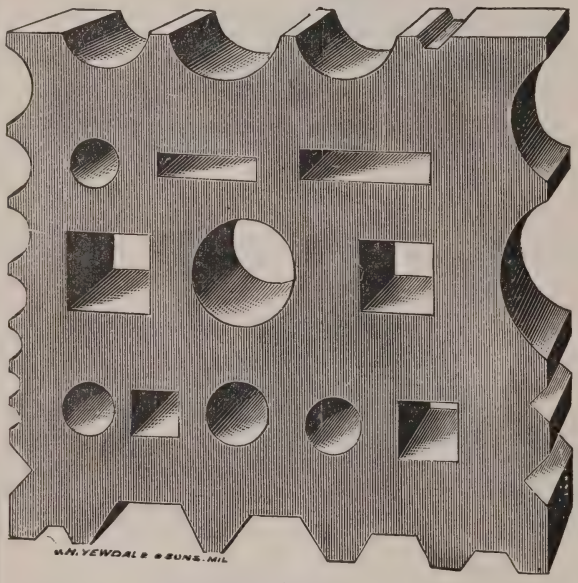


No. 2 Square, each $1 00.

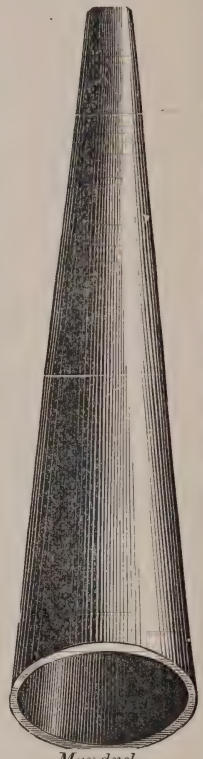


No. 7 Double, each $1 00.

BLACKSMITH'S MANDREL AND SWAGE BLOCK.



Swage Block.



Mandrel.

Swage Block, large size, weight about 300 lbs.	per lb	4½ cents
" " small " " " 160 "	"	4½ "
Mandrels	"	4½ "

FARRIER'S KNIVES.

Wostenholm's I X L ..... each 75 cents

BLACKSMITH'S STOCKS AND DIES.

End Screw.

PRICE LIST.

No. 21.	Cuts 1 inch to ½ inch Right Hand, 9 and 12 Threads to the inch..... " 1 " ¾ " Left " 9 " " ..... 4 Taps and 3 Sets of Dies.	$6 00
No. 23.	Cuts 1 inch to ⅜ inch Right Hand, 9, 10 and 14 Threads to the inch..... 3 Taps and 3 Sets of Dies.	$5 00
No. 32.	Cuts ¾ inch to ⅜ inch Right Hand, 10 and 14 Threads to the inch..... " ¾ " ⅜ " Left " 10 " 14 " " ..... 4 Taps and 4 Sets of Dies.	$5 00
No. 33.	Cuts ¾ inch to ½ inch Right Hand, 10 Threads to the inch..... " ¾ " ½ " Left " 10 " " ..... 2 Taps and 2 Sets of Dies.	$4 00
No. 34.	Cuts ¾ inch to 5/16 inch Right Hand, 10, 12 and 16 Threads to the inch..... 3 Taps and 3 Sets of Dies.	$4 50
No. 35.	Cuts ¾ inch to ⅜ inch Right Hand, 10 and 14 Threads to the inch..... 2 Taps and 2 Sets of Dies.	$4 00
No. 37.	Cuts ⅝ inch to 3/16 inch Right Hand, 14, 18 and 22 Threads to the inch..... 6 Taps and 3 Sets of Dies.	$4 25
No. 38.	Cuts ⅝ inch to 5/16 inch Right Hand, 12 and 18 Threads to the inch..... " ⅝ " 7/16 " Left " 12 " " ..... 6 Taps and 3 Sets of Dies,	$4 50
No. 41.	Cuts ½ inch to ⅛ inch Right Hand, 16, 20 and 26 Threads to the inch..... 6 Taps and 3 Sets of Dies.	$3 25
No. 42.	Cuts ½ inch to 3/16 inch Right Hand, 14 and 20 Threads to the inch..... " ½ " 5/16 " Left " 14 " " ..... 6 Taps and 3 Sets of Dies.	$3 50
No. 53.	Cuts 5/16 inch to 1/16 inch Right Hand, 16, 20, 24 and 32 Threads to the inch..... 4 Taps and 4 Sets of Dies.	$2 75

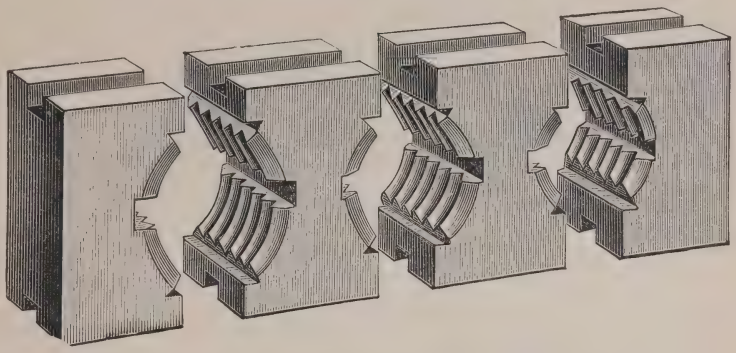
BLACKSMITH'S STOCKS AND DIES.

Side Screw.

PRICE LIST.

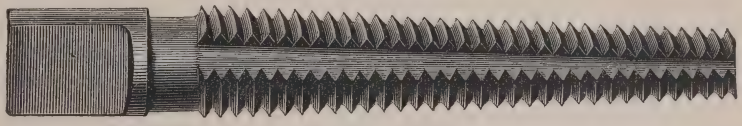
No. 7.	Cuts 1¼ inch to ⅝ inch Right Hand, 8 and 10 Threads to the inch..... " 1¼ " ⅞ " Left " 8 " " ..... 6 Taps and 3 Pair of Dies.	$12 00
No. 9.	Cuts 1¼ inch to ½ inch Right Hand, 8, 10 and 12 Threads to the inch..... 6 Taps and 3 Pair of Dies.	$12 00
No. 17.	Cuts 1 inch to ½ inch Right Hand, 9 and 12 Threads to the inch..... ..... " 1 " ¾ " Left " 9 " " .... 6 Taps and 3 Pair of Dies.	$9 00
No. 19.	Cuts 1 inch to ⅜ inch Right Hand, 9, 12 and 14 Threads to the inch..... 6 Taps and 3 Pair of Dies.	$9 00
No. 25.	Cuts ¾ inch to ⅜ inch Right Hand, 10 and 12 Threads to the inch..... " ¾ " ½ " Left " 10 " " ..... 6 Taps and 3 Pair of Dies.	$6 50
No. 27.	Cuts ¾ inch to ⅜ inch Right Hand, 10, 12 and 16 Threads to the inch..... 6 Taps and 3 Pair of Dies.	$6 50
No. 45.	Cuts ⅝ inch to $\frac{5}{16}$ inch Right Hand, 12 and 16 Threads to the inch..... " ⅝ " $\frac{5}{16}$ " Left " 12 " " ..... 6 Taps and 3 Pair of Dies.	$5 50
No. 47.	Cuts ⅝ inch to ¼ inch Right Hand, 12, 14 and 18 Threads to the inch..... 6 Taps and 3 Pair of Dies.	$5 50
No. 49.	Cuts ½ inch to ¼ inch Right Hand, 14 and 18 Threads to the inch..... " ½ " $\frac{5}{16}$ " Left " 14 " " ..... 6 Taps and 3 Pair of Dies.	$4 50
No. 51.	Cuts ½ inch to $\frac{3}{16}$ inch Right Hand, 14, 18 and 22 Threads to the inch..... 6 Taps and 3 Pair of Dies.	$4 50

EXTRA DIES.



No. of Plates.	Per Set.	No. of Plates.	Per Set.
7 and 9	$3 50	21, 23 and 34	$2 00
11 " 15	3 00	49 " 51	2 00
17 " 19	2 50	33, 35 " 37	1 50
25, 27, 32, 45 and 47	2 25	38, 41, 42 " 53	1 50

TAPER TAPS.

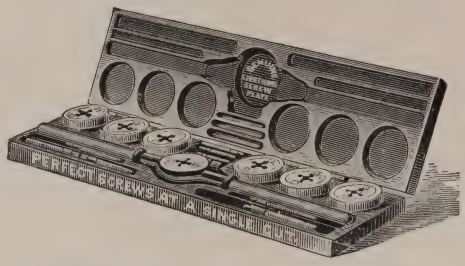


Size	$\frac{1}{8}$ to $\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$ and $\frac{1}{2}$	$\frac{9}{16}$ and $\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 inch
Each	30 cents	35	40	50	65	90	$1 25

PLUG TAPS.

Size	$\frac{1}{8}$ to $\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$ and $\frac{1}{2}$	$\frac{9}{16}$ and $\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 inch
Each	30 cents	35	40	50	65	90	$1 25

LIGHTNING SCREW PLATES.



ASSORTMENT O, STOCK 6 INCHES LONG.

Taps, Dies, Tap Wrench, Stock, etc., with sizes:

$\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$ inch.

Price, in case..... $7 50

Holder for Bit Brace, if required..... 1 00

ASSORTMENT A, STOCK 10 INCHES LONG.

Taper or Plug Taps, Dies, Holders, Stock, etc., of the following sizes:

$\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ inch.

Price, complete in case..... $10 00

To above may be added Die for $\frac{1}{8}$ inch pipe, extra..... 1 50

ASSORTMENT B, STOCK 23 INCHES LONG.

Taper Taps, Dies, Holders, Stock, etc., of the following:

$\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ inch

Price, in case..... $25 00

ASSORTMENT C, STOCK 26 INCHES LONG.

Taper Taps, Dies, Holders, Stock, etc., of the following:

$\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch

Price, in case..... $32 75

To above may be added Taps, Dies, and Collets, $\frac{3}{16}$, $2 20; $\frac{1}{4}$, $2 20; $\frac{5}{16}$, $2 25, or any intermediate sizes at list prices.

ASSORTMENT C, FOR PIPE, STOCK 29 INCHES LONG.

Stock, Dies, and Guides for R. H. or L. H.

$\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch

Price, in case..... $17 00

These Pipe Dies are a superior article, not solid, but in two pieces, and adjustable on the same principle as the Bolt Dies. For same Stock we can also supply Dies for bolts, all sizes, $\frac{3}{16}$ to 1 inch, if required.

ASSORTMENT D, STOCK 53 INCHES LONG.

Taper Taps, Dies, Holders, Stock, etc., of the following sizes:

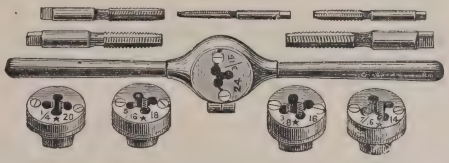
$\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inch

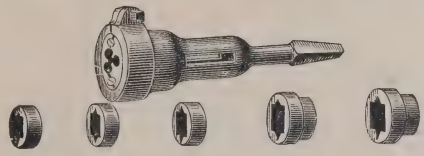
Price, complete..... $60 00

To above may be added any intermediate sizes at list prices.

THE A-1 LIGHTNING SET FOR STRAIGHT OR CROOKED WORK.

Especially for Carriage Makers.

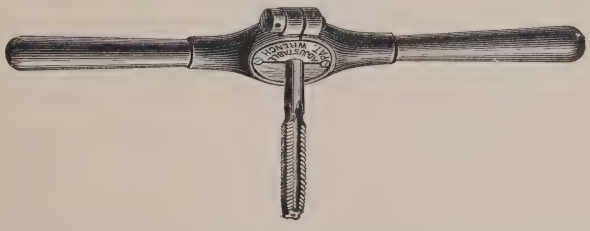




Price of complete set, with Taps and Dies—$\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, and $\frac{7}{16}$ inch—Stock, Bit Brace Holder, and 5 Nut Wrenches, in box..	$12 75
Bit Brace Holder alone, fitting all above sizes.....	1 75
Nut Wrenches.....each	20
To above may be added, if required, $\frac{1}{8}$ inch Pipe Die, to fit both Stock and Brace Holder.....	1 50

STOCKS AND COLLETS.

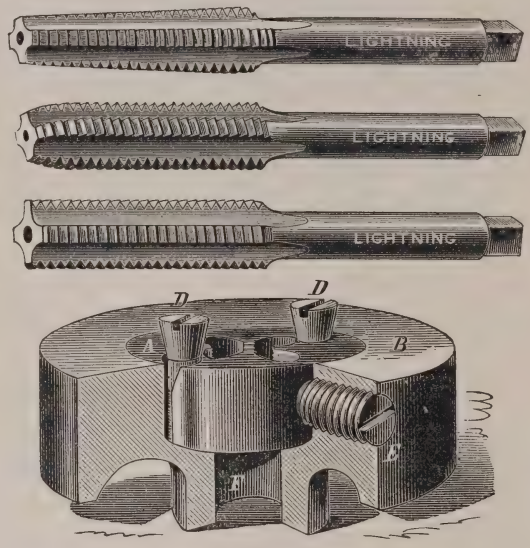
Showing Tap Wrench.



The Tap Wrench, here shown in the Stock, is made like the Dies, and will hold Taps either tightly or loosely, as desired.

Stocks, for Assortment O.....	$1 00
" " " A.....	2 00
" " " B and C.....	4 00
Collets, for O, A, B and C.....each	75
Stocks, for Assortment D.....	10 00
Collets, " " D.....each	1 00

TAPS AND DIES FOR LIGHTNING PLATES.



PRICE LIST.

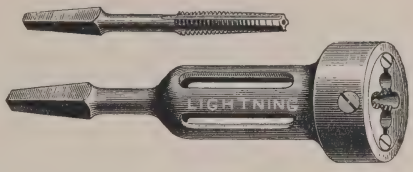
Sizes Inches	Number of Threads to Inch	Hand Taps each Taper Plug or Botm'g	Dies, each without Collets.	Taps, Dies and Collets Sets each For Bolts	Pipe Dies each with Guides	Pipe Taps
3/16	24	$0 45	$1 00	$2 20	.....	.....
1/4	18 and 20	45	1 00	2 25	$1 50	$1 25
5/16	16 " 18	50	1 00	2 25	.....	.....
8/8	14 " 16	55	1 15	2 45	1 90	1 50
7/16	12, 14 " 16	60	1 30	2 65	.....	.....
1/2	12, 13 " 14	70	1 50	2 95	2 35	1 87
9/16	12 " 14	80	1 75	3 30	.....	.....
5/8	10, 11 " 12	90	1 90	3 55	.....	.....
11/16	11 " 12	1 05	2 10	3 90	.....	.....
8/4	10	1 20	2 35	4 30	3 75	2 50
13/16	10	1 40	2 60	4 75	.....	.....
7/8	9 " 10	1 60	3 00	5 35	.....	.....
15/16	9	1 80	3 40	5 95	.....	.....
1	8	2 00	3 75	6 50	5 00	3 12
1 1/8	7 " 8	2 25	4 40	7 65	.....	.....
1 1/4	7	2 60	5 00	8 60	5 50	3 75
1 3/8	6	3 00	5 75	9 75	.....	.....
1 1/2	6	3 50	7 00	11 50	5 50	4 62

Left Hand Taps and Dies same price as right hand.

Unless otherwise ordered, we fit the Lightning Plates with V thread Taps and Dies for rough iron 1/64 over standard size for all sizes 7/16 inch and under; and for all larger sizes, 1/32 over. Whitworth and Franklin Institute standard supplied when ordered.

LIGHTNING TAPS AND DIES.

For Bit Brace.



PRICES.

	3/16	1/4	5/16	3/8	7/16 in
Die Tap and Holder complete....	$2 25	$2 25	$2 30	$2 50	$2 60
Die only.....	1 00	1 00	1 00	1 15	1 15
Tap only.....	50	50	55	60	70

LIGHTNING TAPER REAMERS.

For Bit Brace.

PRICES.

1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4 inch
45 cts	50	55	60	70	80	90	$1 05	1 20 each

Full Set 9 Reamers in case..... $7 25

LIGHTNING COUNTERSINKS.

For Bit Brace or Drilling Machine.

Price, each..... 50 cents

MACHINE TAPS AND DIES.

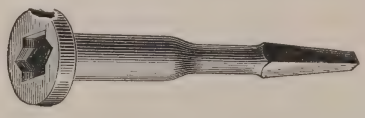
For Bolt Cutting Machines.

PRICE LIST.

Diameter. Inches.	Number of Threads to Inch.	Prices of Machine Taps Each.	Prices of Machine Dies Each.
$\frac{1}{4}$	18 and 20	$0 60	$1 00
$\frac{5}{16}$	16 " 18	70	1 00
$\frac{3}{8}$	14 " 16	80	1 15
$\frac{7}{16}$	12, 14 " 16	90	1 30
$\frac{1}{2}$	12, 13 " 14	1 00	1 50
$\frac{9}{16}$	12 " 14	1 15	1 75
$\frac{5}{8}$	10, 11 " 12	1 30	1 90
$\frac{11}{16}$	11 " 12	1 45	2 10
$\frac{3}{4}$	10	1 60	2 35
$\frac{13}{16}$	10	1 80	2 60
$\frac{7}{8}$	9 " 10	2 10	3 00
$\frac{15}{16}$	9	2 40	3 40
1	8	2 80	3 75
$1\frac{1}{8}$	7 " 8	3 20	4 40
$1\frac{1}{4}$	7	3 70	5 00
$1\frac{3}{8}$	6	4 20	5 75
$1\frac{1}{2}$	6	4 70	7 00
$1\frac{5}{8}$	5	5 30	8 50
$1\frac{3}{4}$	5	6 00	10 00
2	5	7 70	12 00

LIGHTNING NUT WRENCH.

FOR SQUARE OR HEXAGON NUTS.



For Bit Brace.

Set of 5 Wrenches for $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$ inch Nuts..... $1 25

MORSE TWIST DRILLS.

Shanks 2¼ inches long and ⅝ inches diameter.

Diameter.	Length.	Price each.	Diameter.	Length.	Price each.
9/64	6 inch	$0 58	29/64	6 inch	$0 93
5/32	6 "	65	15/64	6 "	98
17/64	6 "	75	31/64	6 "	1 03
9/32	6 "	80	1/2	6 "	1 10
25/64	6 "	88	33/64	6 "	1 30

Fitting Coe's Blacksmith Drill Press.

Fitting Worcester Drill Presses Nos. 3 and 4.

MORSE TWIST DRILLS.

Shanks 2½ inches long and ½ inch diameter.

Diameter.	Length.	Price each.	Diameter.	Length.	Price each.
1/8	5⅛ inch	$0 45	7/16	7¼ inch	$0 90
9/64	5⅜ "	45	29/64	7½ "	95
3/16	5⅝ "	50	1/2	7¾ "	1 00
13/64	5⅞ "	55	33/64	8 "	1 10
1/4	6⅛ "	60	9/16	8¼ "	1 20
17/64	6¼ "	65	37/64	8½ "	1 30
5/16	6⅜ "	70	5/8	8¾ "	1 40
21/64	6½ "	75	21/32	9 "	1 50
3/8	6¾ "	80	3/4	9¼ "	1 60
25/64	7 "	85	25/32	9¾ "	1 85

Fitting all Worcester Drills excepting Nos. 3 and 4.

Fitting Green River Drills, all sizes.

Orders for Drills ¼ inch to 9/16 will be filled with size 1/64 larger, and ⅝ inch and over with 1/32 larger, unless otherwise directed.

MORSE BIT STOCK DRILLS.

For Metal or Wood.

Diameter.	Price per doz.	Price each.	Diameter.	Price per doz.	Price each.
2/32	$1 50	$0 14	10/32	$5 40	$0 48
3/32	1 65	16	21/64	5 85	54
4/32	2 10	20	12/32	7 20	62
9/64	2 35	24	25/64	7 60	68
6/32	3 10	29	14/32	8 80	75
13/64	3 35	33	29/64	9 20	82
8/32	4 10	38	16/32	10 30	87
17/64	4 40	43	33/64	10 65	92

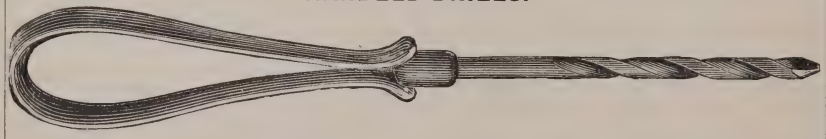
Morse Bit Stock Drills will fit any brace in the market, and will drill Steel, Iron, or other Metals, as well as Wood. They are not injured by contact with screws or nails, and will bore any kind of Wood without splitting it. Unless otherwise ordered, we will send all Bits 1/64 large.

PATENT WOOD BORING DRILLS.

Bit Stock Drills.

No.	4	5	6	7	8	10	12	14	16	18	
Size	1/8	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	inch
Price	$1 60	1 75	2 00	2 50	3 00	3 50	4 00	4 50	5 00	5 50	per doz

HANDLED DRILLS.



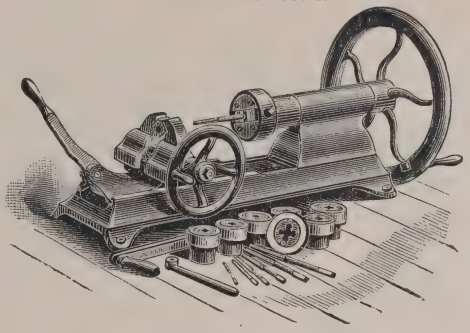
No.	4	5	6	7	8	
Size	1/8	5/32	3/16	7/32	1/4	inch
Price	$1 40	1 50	1 75	2 00	2 25	per doz

The above Drills are specially adapted for use in hard wood, being made of a good quality of Steel, and carefully tempered. They work well with the grain, and will cut a straight, smooth hole. The larger sizes may be used as Reamers without previous plugging. They work easily, do not bind, and are not liable to split the wood. While they are not sold as drills for Iron, no fears need be entertained of damage by meeting nails or screws.

BOLT CUTTER AND NUT TAPPER.

Especially for Crooked Work.

LIGHTNING NO. 0.



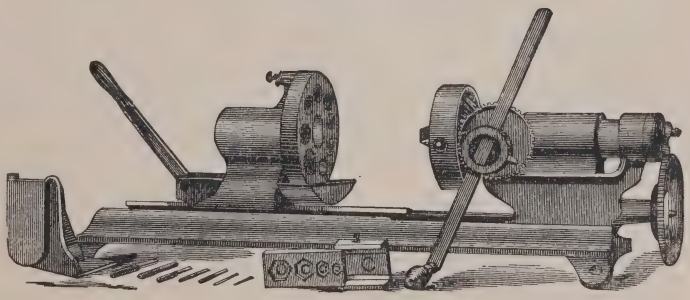
WEIGHT, 200 LBS.

Fitted with seven sizes. Usual assortment, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$ and $\frac{3}{4}$ inch.

Price, complete without Balance Wheel	$60 00
" " with Balance Wheel	65 00
Collets for extra Dies, each	1 00

BOLT CUTTER, NUT TAPPER AND DRILL.

NO. 1-COMBINED MACHINE.



No. 1. For Bench or Table. Fitted with seven sizes from $\frac{1}{4}$ inch to $\frac{3}{4}$ inch. Usual assortment, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$ and $\frac{3}{4}$ inch. Drill with automatic feed.

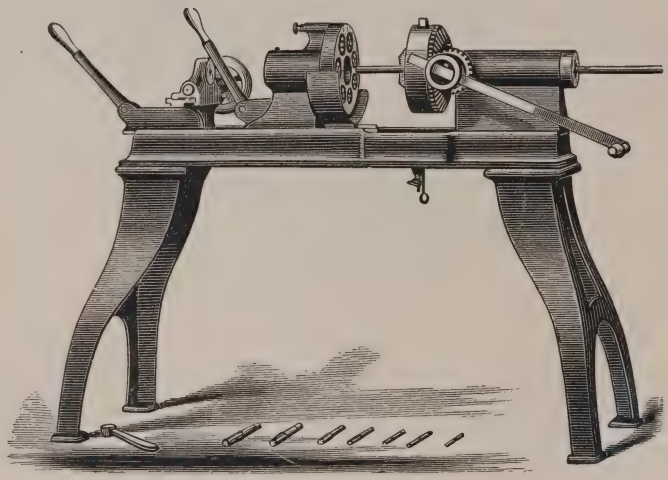
Price, with Taps, Dies, Nut Chuck and Drill Rest $85 00

No. 2, Same as above, but mounted handsomely and strongly on Iron legs.

Price, complete	$95 00
Extra $\frac{1}{2}$ Tap and Die	6 10

BOLT CUTTER AND NUT TAPPER.

LIGHTNING NO. 2½.



No. 1½. Hand Bolt Cutter and Nut Tapper. For the Bench or Table. Fitted with seven sizes from ⅜ inch to 1 inch, inclusive. Usual assortment, ⅜, 7/16, ½, ⅝, ¾, ⅞ and 1 inch; all 1/32 over exact standard, unless ordered.

Price, complete with Taps, Dies, Nut Chuck, etc..... $100 00

No. 2½. Same as above but mounted handsomely and strongly on Iron Legs, complete..... $110 00

If desired we can furnish the following extra tools with No. 1½ and No. 2½ Machines:

Taps and Dies (in Collets) for Nuts and Bolts.

¼,	5/16,	1⅛,	1¼ inch
$2 60	$2 70	$8 60	$9 70

Dies (in Collets) for threading Pipe in Machine.

¼,	⅜,	½,	¾,	1 inch
$2 50	$2 90	$3 35	$4 75	$6 00

Hole through Spindle, 1⅜ inch.

The Chuck is large and powerful, provided with Norway Iron case-hardened jaws, so formed as to grasp and center irregular shapes, and to pass bolts of any length.

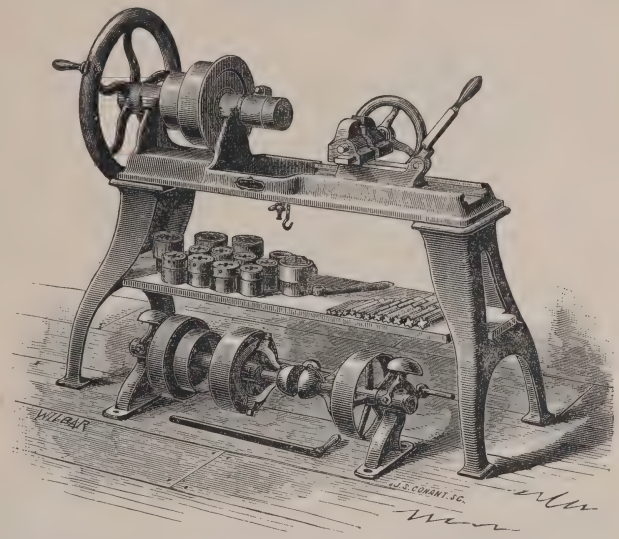
The Dies are set in a revolving head, so that all the sizes are always ready, and any one can be brought into line with a touch.

A sliding Vise is provided for tapping Nuts, and is useful for a variety of other purposes, such as holding pipe-threading Dies, or bolt-threading Dies of unusual sizes.

The oil used on the work is caught, and conducted into a basin under the Chuck, so that none is wasted. Weight of machine, about 225 lbs.

BOLT CUTTER AND NUT TAPPER.

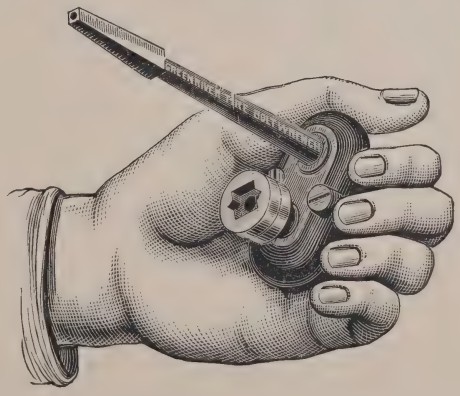
LIGHTNING NO. 30.



Assortment, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$ and $\frac{3}{4}$. Fitted for both hand and power, with Taps and Dies and patent friction Countershaft.

Price, complete..... $110 00

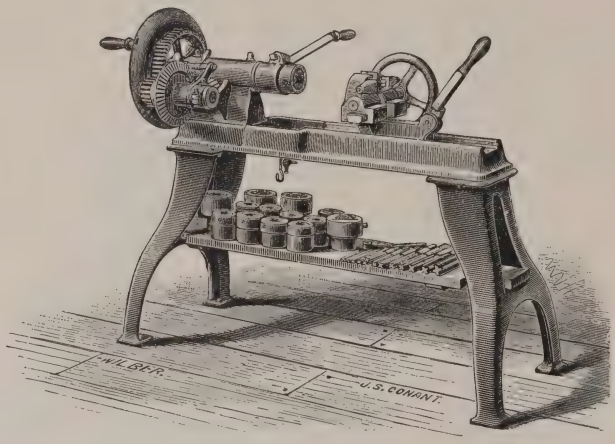
GREEN RIVER PATENT RIM WRENCH.



For Nuts on Tire Bolts inside Rim.....Price, each $1 50

BOLT CUTTER, NUT TAPPER & PIPE THREADER.

LIGHTNING NO. 10.



WEIGHT, 350 LBS.

The capacity of this machine is, for Nuts and Bolts, $\frac{3}{16}$ to 1½ inch, and for Pipes, ⅛ to 2 inches. Any crooked or odd-shaped pieces may be threaded without straightening. The engraving shows a ½ inch Staple held in the Chuck. Bolts and Nuts, say ¾ inch and under, are rapidly done, with the gears out, by the handle on the Balance Wheel, in which wheel, moreover, the Crank may be placed when desired. For large work the gearing multiplies the direct force of the Crank at side of the machine between six and seven fold, and the arrangement is such that the Die being run sufficiently far on the work, the gears may instantly be thrown out, and the Die whirled swiftly back off the thread by means of the Balance Wheel.

Extra Steel Dogs are attached to the Chuck to secure large, smooth pipe, which might sometimes slip in the Jaws.

The remarkably great range of this machine—it being equally excellent on very large, very small, on crooked or straight Bolts (with Nuts), and on pipe—must make it a favorite.

We subjoin three different assortments of sizes of Taps and Dies, with prices. By use of our price list of Taps and Dies, buyers can modify them to their liking, changing prices accordingly.

ASSORTMENT 1.

Machine complete, with Taps and Dies (in Collets) for Bolts and Nuts—¼, $\frac{5}{16}$, ⅜, $\frac{7}{16}$, ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, and 1½ inch; complete, with Tap Chuck, Wrenches, etc., etc..... $172 25

ASSORTMENT 2.

Machine complete, with Taps and Dies (in Collets) for Bolts and Nuts—⅜, $\frac{7}{16}$, ½, ⅝, ¾, ⅞, and 1 inch; complete, with Tap Chuck, Wrenches, etc., $125 00

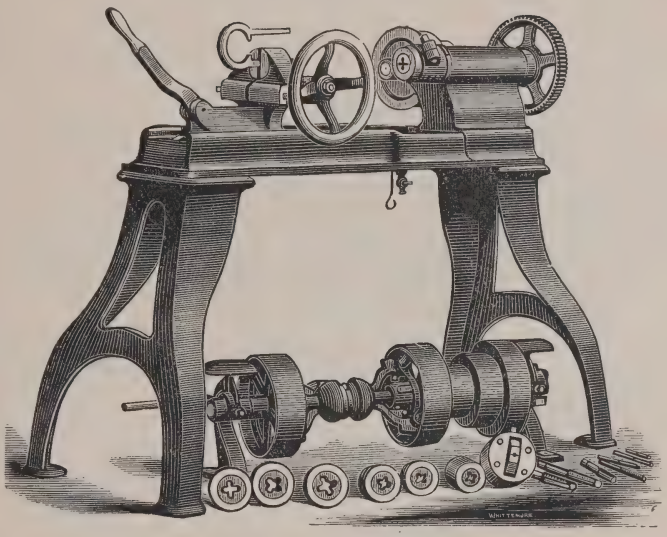
ASSORTMENT 3.

Machine complete, with Dies and Collets for pipe, R. H., ⅛, ¼, ⅜, ½, ¾, 1, 1¼, 1½, and 2 inch..... $160 00

When mounted on Iron Legs, as above, $10 extra.

BOLT CUTTER AND NUT TAPPER.

LIGHTNING NO. 40.



No. 40. Bolt Cutter and and Nut Tapper. Fitted with seven sizes, from $\frac{3}{8}$ inch to 1 inch. Usual assortment, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$ and 1 inch. Price, with above Taps and Dies (in Collets), Nut Chuck, Countershaft, etc., etc., complete..... $175 00

Collets for extra Dies, if required .....each 1 00

For some kinds of work it is convenient to have the pieces to be threaded, which, when ready to be cut, may be irregular in shape, held stationary and to have the Dies revolve. This Machine is designed to satisfy such a want, and will be found an excellent Bolt Cutter for straight as well as crooked work. The Dies are held separately in Collets.

A strong Vise holds the Bolts or the Nuts, and a Tap Chuck is fitted to the same place as the Collets holding the Dies. The oil used is caught and conveyed to the receiver under the Dies, from which it may be strained and used again.

Though made for but a short time, this Machine has been very favorably received. Among purchasers are the prominent manufacturers of carriages: Studebaker Bros. Manufacturing Company, South Bend, Ind., Brewster & Co., New York, and the Abbot Downing Co., Concord, N. H.

BOLT CUTTER AND NUT TAPPER.

WORCESTER NOS. 2 AND 2½.

NO. 2. WEIGHT COMPLETE 225 LBS.

PRICES.

No. 2 is fitted to cut nine sizes, as follows: ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞ and 1 inch.

Price, complete with Solid Dies..... $85 00 Adjustable Dies..... $88 00

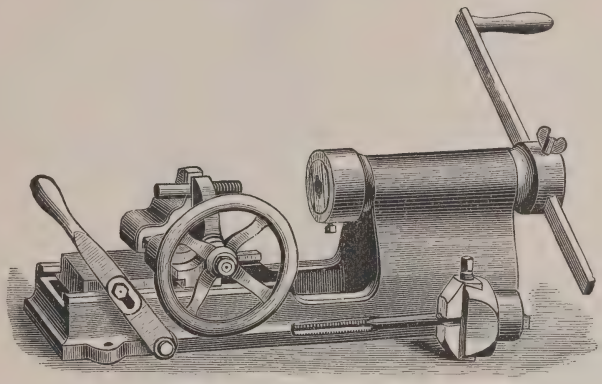
No. 2½ cuts eleven sizes, as follows: ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞, 1, 1⅛ and 1¼ inch.

Price, complete, with Solid Dies..... $98 00 Adjustable Dies..... $104 00

Nos. 2 or 2½, mounted on long Iron Legs, $3 00 extra.

BOLT CUTTER AND NUT TAPPER.

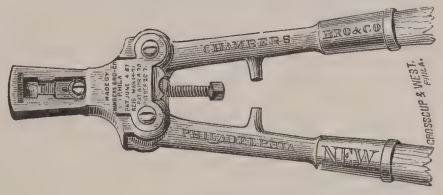
WORCESTER NO. 1.



Weight complete, 98 pounds. Cuts $\frac{1}{4}$ to $\frac{3}{4}$ inch. Price, with Seven Taps and Dies to match, cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$ and $\frac{3}{4}$ inch..... $55 00

Solid or Adjustable Dies furnished as desired.

BOLT AND RIVET CLIPPER.



PRICES.

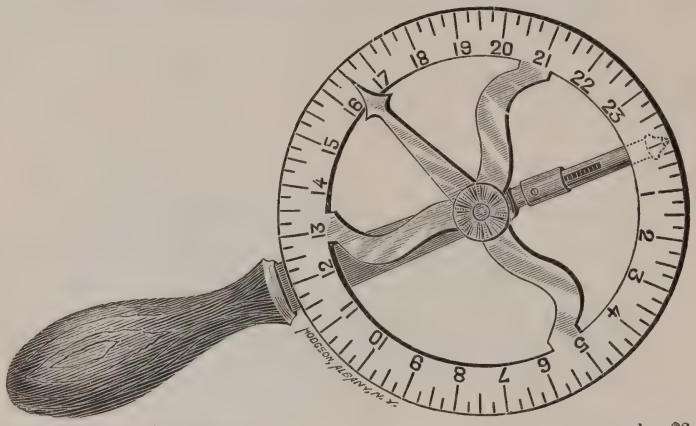
No. 1	For $\frac{3}{8}$ in. bolt or less,	for	carriage work and harness makers		$7 50
" 2	" $\frac{1}{2}$ "	"	" wheelwrights, machinists, etc....		9 00
" 3	" $\frac{5}{8}$ "	"	" car builders and heavy work.....		12 00

EXTRA CUTTERS, *Sliding or Stationary.*		HEADS, *Or Main Frame.*		RACKS, *Carrying Sliding Cutter.*	
No. 1.....	each $0 40	No. 1.....	each $1 75	No. 1.....	each $0 50
" 2.....	" 50	" 2.....	" 2 25	" 2.....	" 75
" 3.....	" 75	" 3.....	" 3 00	" 3.....	" 1 00

IRON LEVERS, *For the Wooden Handles.*		SCREWS FOR LEVER.		STEEL ADJUSTING SCREWS.	
No. 1.....	each $0 50	No. 1.....	each $0 25	No. 1.....	each $0 25
" 2.....	" 75	" 2.....	" 35	" 2.....	" 35
" 3.....	" 1 00	" 3.....	" 50	" 3.....	" 50

SLIDING CUTTER SCREWS.		STATIONARY CUTTER SCREWS.	
Each.....	$0 05	Each.....	$0 05

LYON'S IMPROVED TIRE GAUGE.



Price, with Pencil Attachment.....each $2 00
" without " " ..... " 1 75

It consists of a Wheel 24 inches in circumference, marked off into inches and fractional parts of an inch, with a movable Hand or Index and a spring actuated Pencil.

DIRECTIONS FOR OPERATING.

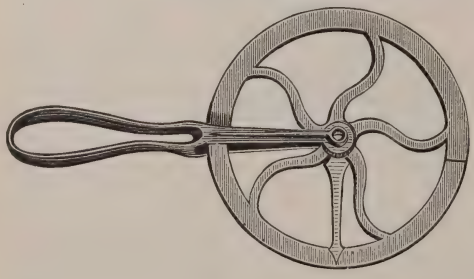
Make a mark on the Tire by sliding the Pencil outward in the sleeve which holds it. When the mark is made the Pencil will be drawn back by the reaction of the Spring. Then place the point on the Wheel where the scale commences against this mark.

The Wheel is then run around the circle, the number of revolutions of the Wheel being noted. On arriving at the starting point the Index or Hand is set to that point: thus the distance around the circle will be readily indicated and the mind of the operator relieved from the necessity of recollecting, as the scale can be re-rerred to at any time thereafter.

In measuring Lumber it is accurate and saves 50 per cent. in time.

They are manufactured from Brass and polished.

GREEN RIVER MEASURING WHEEL.



We aim to supply Wheelwrights with a perfect running Wheel, turned carefully in a lathe, and made to revolve on the points of screws so as to wear true, at a price cheaper than they can afford to make it.

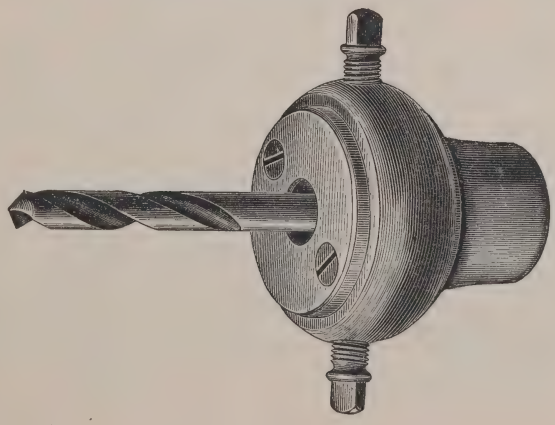
The Index Hand saves trouble of marking with chalk, and the whole, made of metal, is light, accurately fitted, handy and strong.

Price.....each $1 25

GREEN RIVER HORSE SHOER'S MACHINE.

A Vise and Steel Dies expressly for welding and Swaging Toe and Heel Calks. Price..... $25 00

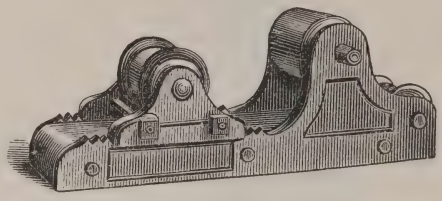
ADJUSTABLE DRILL CHUCK.



Holds $\frac{1}{16}$ to $\frac{5}{8}$ inch. Price, fitted to Worcester Drills..... $6 00

BLACKSMITH'S TIRE BENDER.

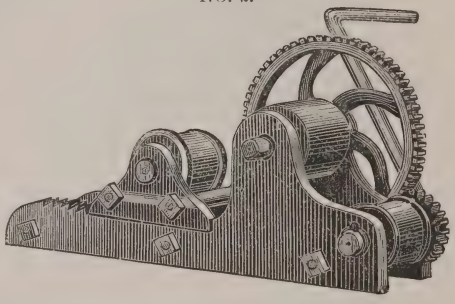
NO. 1.



Three Rollers, without Gear.....each $7 00

BLACKSMITH'S TIRE BENDER.

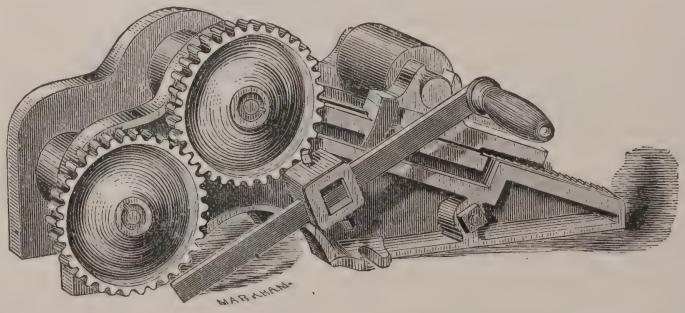
NO. 2.



Three Rollers, with Cog Wheel and Pinion.....each $9 00

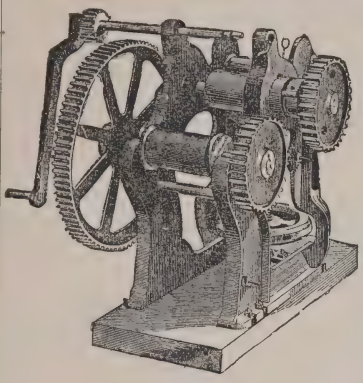
COE'S TIRE BENDER.

NO. 1.

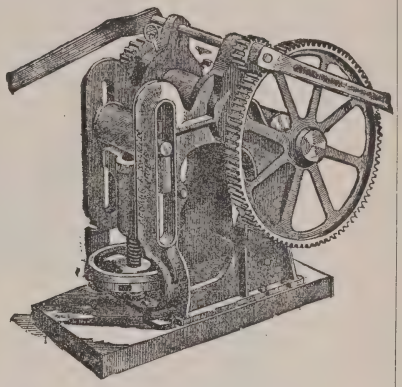


Will bend Tire 4 inches wide..... $12 00

GIANT TIRE BENDERS.



Open.



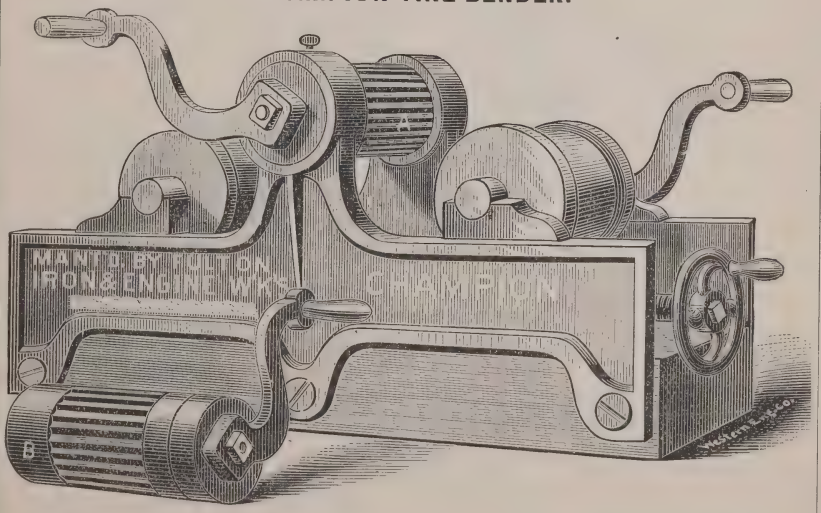
Closed.

PRICES.

No. 1	Will bend	1¼	by	6	inch	Iron,	weight	360 lbs.....	$45 00
" 2	"	"	1	by	6	"	"	" 260 "	35 00
" 3	"	"	¾	by	6	"	"	" 160 "	25 00

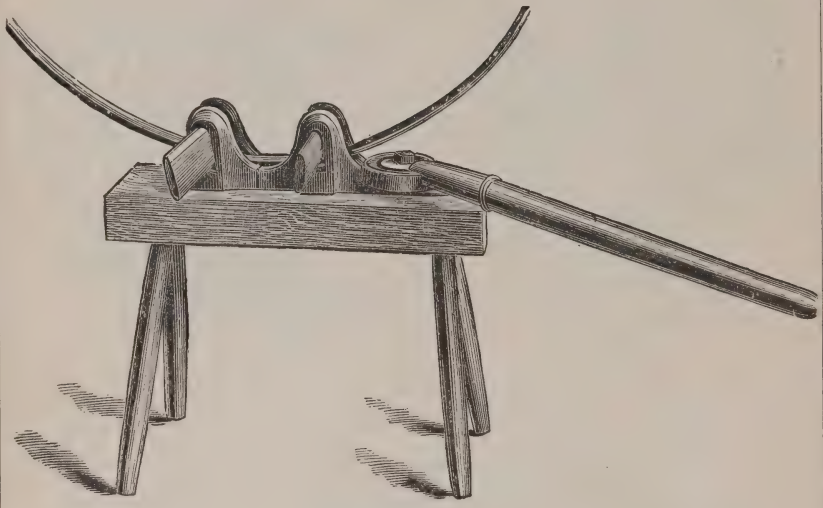
The large size has shifting Collars that can be set for any size Tire. Also for Fifth Wheels.

CHAMPION TIRE BENDER.



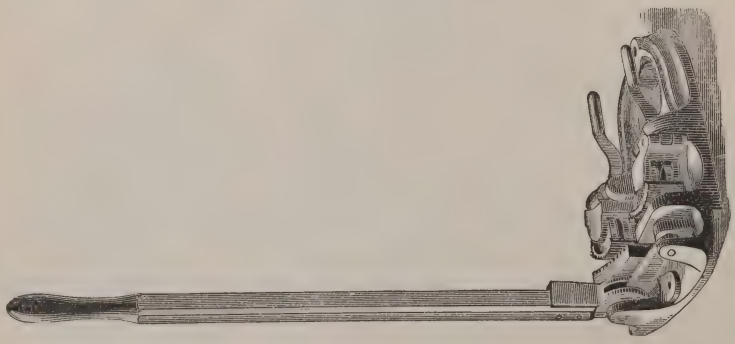
Will Bend ¾ Tire 4 inches wide..... $12 00

MECHANIC'S TIRE SHRINKER.



Price, each..... $10 00

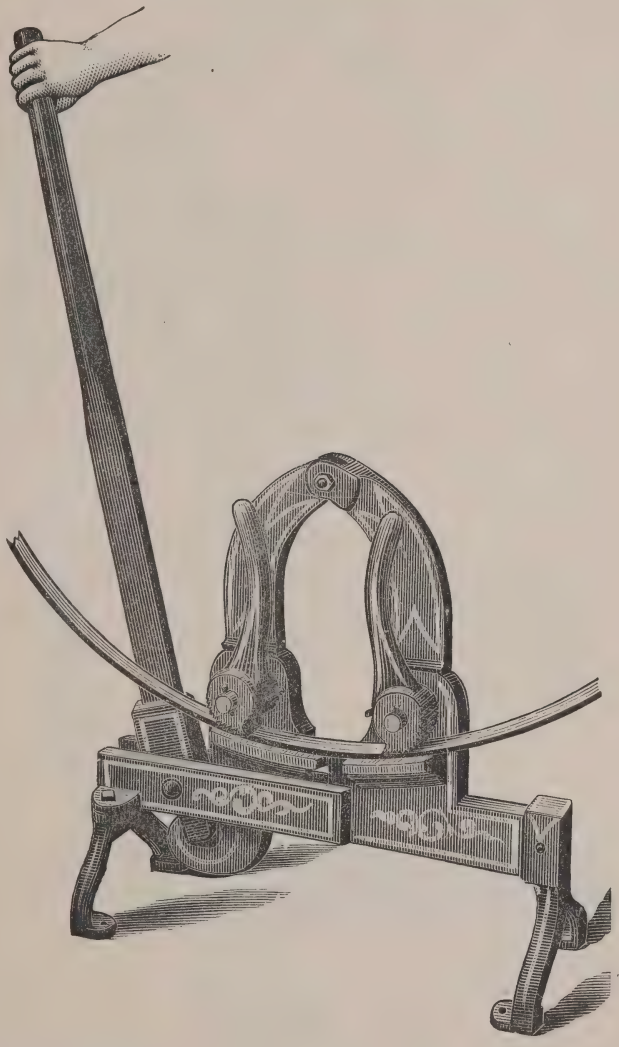
GREEN RIVER TIRE SHRINKER.



WEIGHT 160 LBS.

Price, each..... $20 00

MAGIC TIRE SHRINKER.

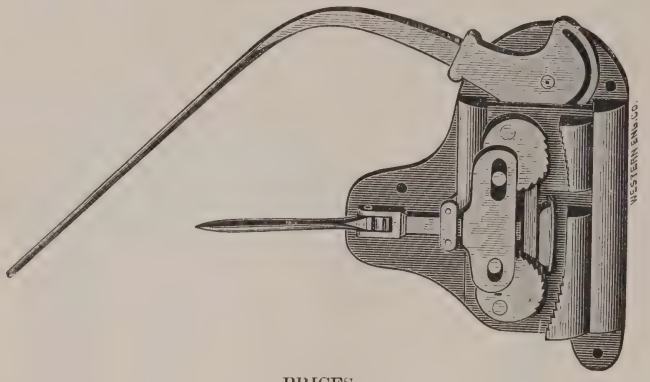


A very cheap and strong Upsetter, occupies but little room, and will shrink Tire of any width and thickness.

Price.....each $15 00

LIGHTNING TIRE UPSETTER.

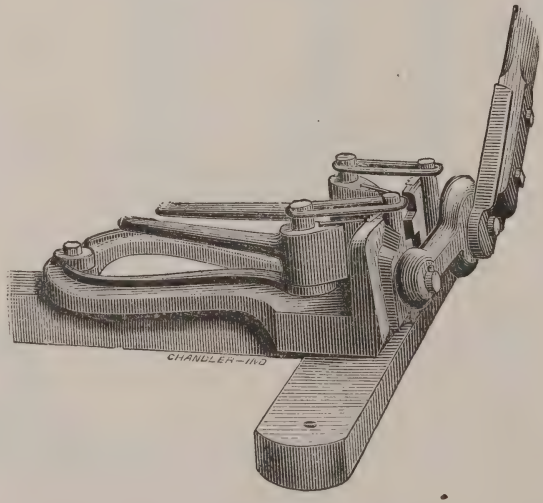
STODDART'S PATENT.



PRICES.

2 inch Upsetter	each	$20 00
4 " "	"	25 00
4 " Tire and Axle Upsetter Combined		28 00

YOUNT'S TIRE UPSETTER.



Will Upset Tire from ¼ to 4 inches wide and ⅝ inch thick at one heat. Will also Upset Bar Iron or Carriage Axles from 1½ inch down.

Price, each $16 50

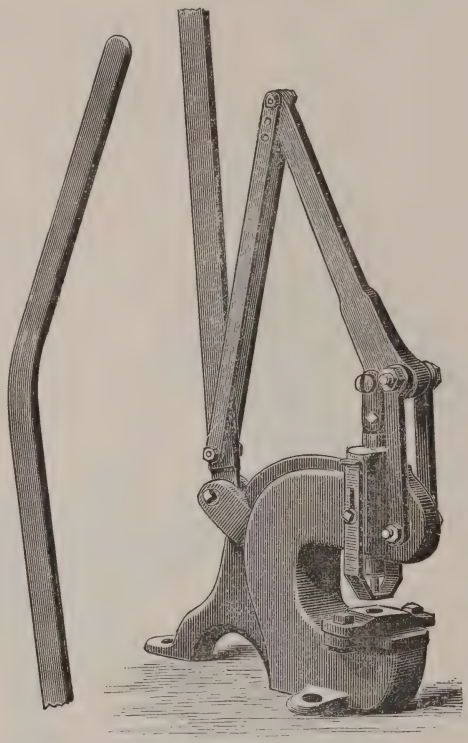
TIRE SHRINKER AND PUNCH.

OLMSTEAD & DINSMORE.

Strong and durable Machine. Small or Large, Light or Heavy Tire can be shrunk at least one inch by one movement of the lever. Price, each..... $18 00

SUMMIT CITY HAND PUNCH.

OUR OWN MANUFACTURE.



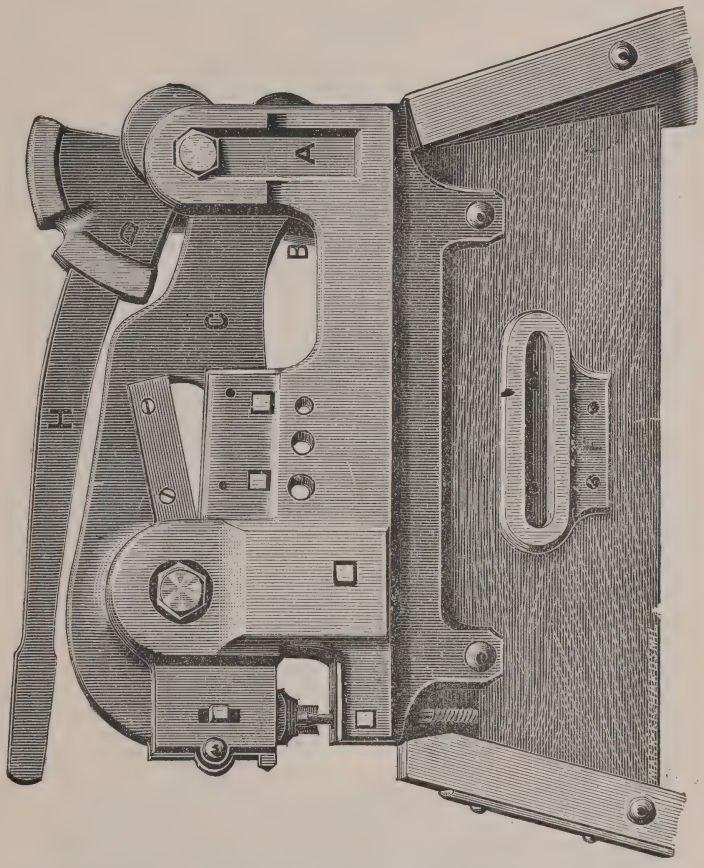
There has long been a demand for a good, substantial Hand Punch for light work, but until we got out the Summit City have never been able to find one fully meeting the requirements. We can confidently recommend this little Machine as being strong, durable and easily operated, and superior to anything in the market at the price.

It will punch holes 4 inches from edge and will easily punch ¼, $\frac{5}{16}$ and ⅜ holes.

To work conveniently the Punch should be securely fastened to a block or bench two feet from the floor and be kept well oiled. In doing heavy work the point of the Punch should be oiled for every hole. In withdrawing the Punch do not touch the Iron, but allow the Machine to clear itself, thus avoiding danger of breaking the Punch. By carefully following these directions the Machine will do a large amount of work with very little repair to the tools.

Price..... .....each $35 00

BURDICK'S PUNCH AND SHEAR.



This Machine has two sets of blades for Shears; one for cutting Flat and Square Iron, and one for Round Iron.

It cuts Flat Iron 5 inches wide and will cut ⅜ by 4 or ⅝ by 2 Iron. Has three round knives for cutting Round Iron from ⅓ to ⅞.

It has four Punches and Dies ¼, ⅜, ½ and ⅝, and will punch ⅜ holes through ½ Iron.

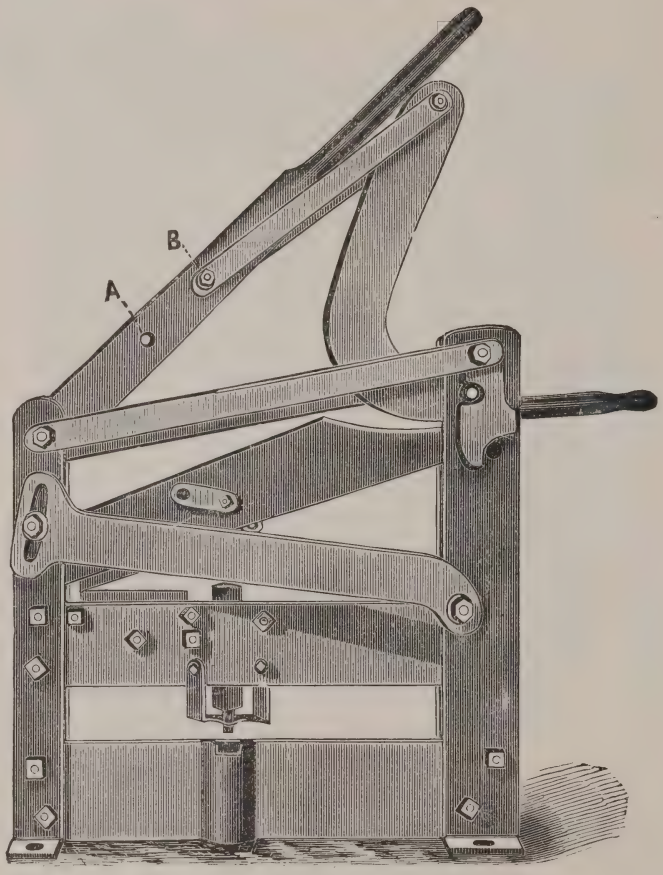
PRICES.

No. 6.	Punch and Shear complete	$50 00
" 7.	Shear complete, without Punches	40 00

Extras Fitted: A, $8 00; B, $4 00; C, $4 00; D, $3 00; E, $2 00; F, $1 00; Dies, $1 25; Punches, 85 cents; Blades, 75 cents each.

WROUGHT IRON PUNCH AND SHEAR.

CUT NO. 103.



PRICES.

No. 103. Punch and Shear. Will Cut 4 by ¾ Flat and 1¼ inch Round or Square Iron and will Punch ½ inch hole through ½ inch Iron. Price $50 00

No. 104. Punch and Shear. Will Cut 4 by ⅝ Flat and 1⅛ inch Round or Square Iron. Will Punch ⅜ hole through ⅜ Iron. Price..... $45 00

No. 105. Shears. Will Cut 4 by ¾ Flat and 1¼ inch Round or Square Iron. Price..... $35 00

No. 106. Shears. Will Cut 4 by ⅝ Flat and 1⅛ Round or Square Iron.... $30 00

TIRE UPSETTER, PUNCH AND SHEAR.

DOTY'S COMBINED MACHINE.

Letter A. Punches ⅝ thick, Cuts 2 by ⅝ Flat or ¾ Round or Square Iron. Will Upset Tire 1¼ inches wide. Price..... $45 00

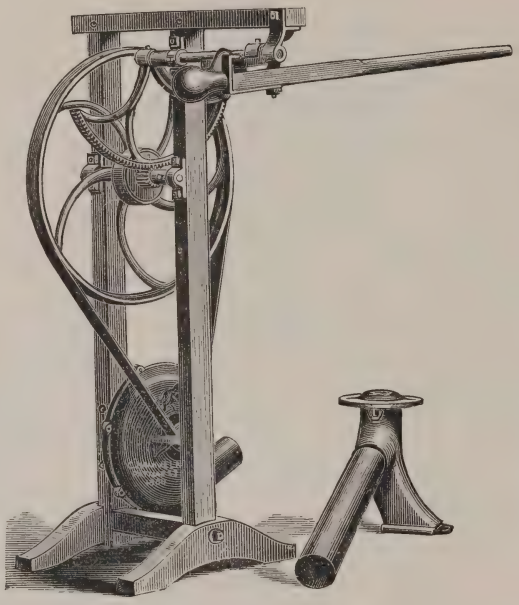
Letter B. Punches ½ inch hole in ½ inch Iron, Cuts 3 by ½ inch Flat and ⅝ inch Round and Square. Will Upset Tire 3½ inches wide. Price..... $75 00

BURDICK'S COMBINED MACHINE.

No. 3 Will Upset Tire 2 by ¾. Punches ⅝ inch and Cuts 2 by ½ inch Flat Iron. Price, with ¼, ⅜, ½ and ⅝ inch Punches and Dies..... $45 00

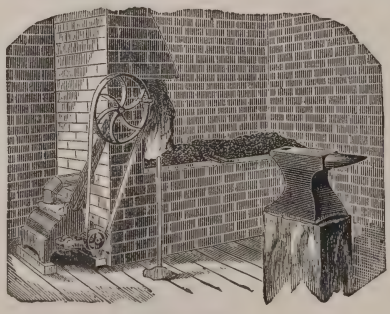
BLACKSMITH'S HAND BLOWER.

BUFFALO NO. 3.



Price, with Tuyer Iron complete	$25 00
" without " "	23 00

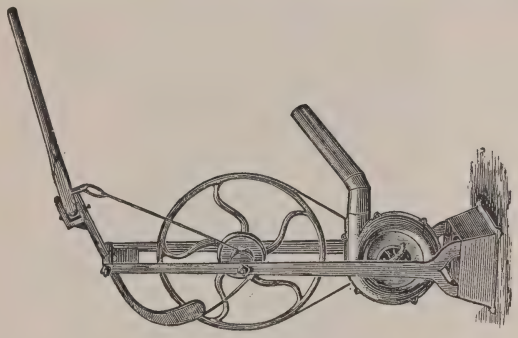
ROOTS' BLACKSMITH'S HAND BLOWER.



PRICES.

No. ½. For one ordinary fire	$40 00
No. 1. " " heavy "	50 00
No. 2. " one or two fires	70 00

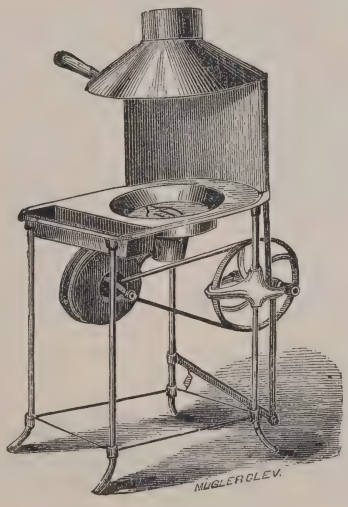
SMITH'S BLACKSMITH'S HAND BLOWER.



PRICES.

No. 1. With Tweer Iron	$18 00
" 2. " " "	21 00
Tweer Irons for Blower	3 00

HOLT'S PORTABLE FORGE.

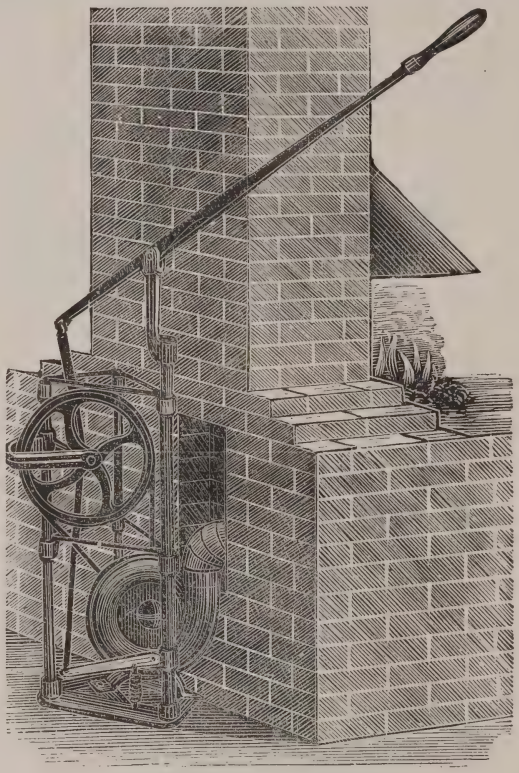


NO. 0, WITH HOOD.

Height 30 inches, Fan 8 inches, Fire Pan 18x20 inches, Weight 65 lbs.

Price, with Back	each	$23 00
" " Hood	"	25 00

HOLT'S BLACKSMITH'S HAND BLOWER.



Price, with Tuyer Iron..... $25 00

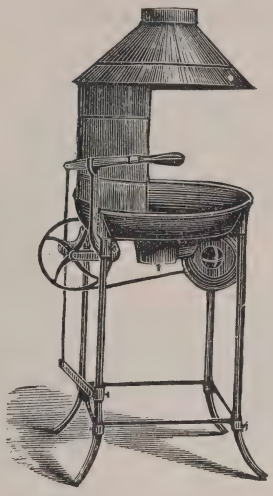
ROOTS' PORTABLE FORCES.

PRICES.

No. 1.	For Boiler Work, etc., without Hood.....	$45	00
" 2.	Blast equal to 30 inch, Bellows with Hood.....	55	00
" 3.	" " 36 " " " "	75	00
" 4.	" " 40 " " " "	100	00

HOLT PORTABLE FORCE.

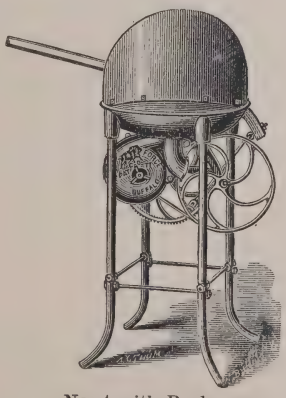
NO. 1, WITH HOOD.



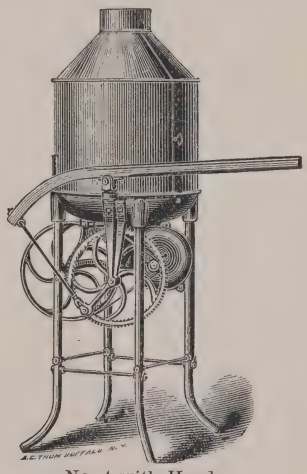
Height 30 inches, Fire Pan 21 inches, Fan 8 inches, Weight 90 lbs.

Price, No. 1 with Back		$28 00
" " 1 "	Hood	30 00
" " 1 "	Closed Hood	33 00

BUFFALO PORTABLE FORCE.



No. 4 with Back.



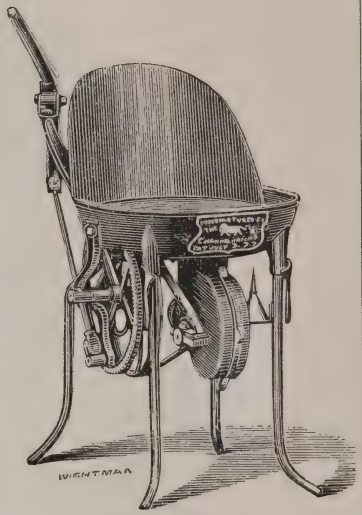
No. 4 with Hood.

Height 33 inches, Fire Pan 18 inches, Weight 75 lbs.

Price, No. 4 with Back		$24 00
" " 4 "	Hood	27 00
" " 4 "	Closed Hood	30 00

BUFFALO PORTABLE FORCES.

No. 1 with Hood.



No. 3 with Back.

Forge No. 1 is 29 inches high, Fan 8 inches, Fire Pan 21x27, and weighs 145 lbs. with Hood.

Forge No. 2. is same size and capacity as No. 1, weighing 155 lbs., but has a *Closed Hood.*

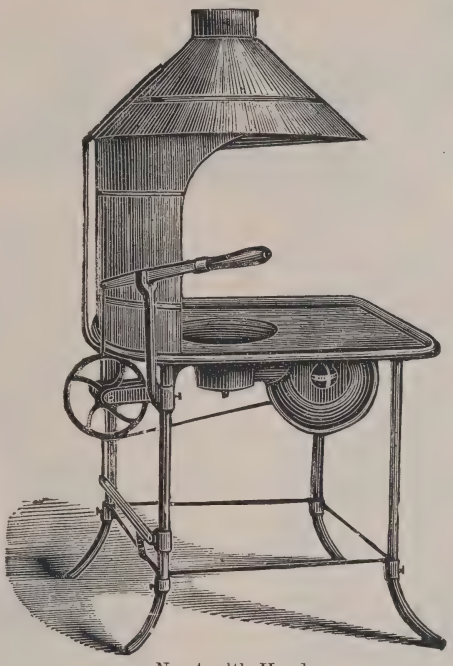
Forge No. 3 is same size and capacity as Nos. 1 and 2, but is open with Back.

Forges Nos. 1, 2 and 3 will produce a welding heat on Iron 2½ inches diameter in 5 minutes, and on heavier Iron if required.

PRICES.

No. 1.	Weight 145 lbs	each		$40 00
" 2.	" 155 "	"		42 00
" 3.	" 140 "	"		36 00

HOLT'S PORTABLE FORGES.



No. 4 with Hood.

Forge No. 4 is furnished with fire brick lining and is large enough for any ordinary blacksmithing.

It is portable, occupies but little space and gives a very strong and steady blast. It weighs 175 lbs.; is 28 inches high; Fan 12 inches, and has a Fire Pan 30x40 inches.

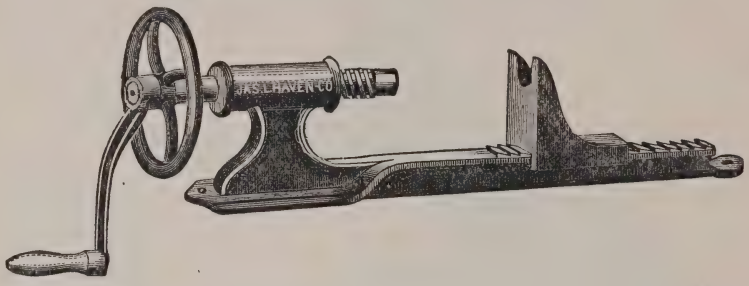
Price, with Hood..... $45 00

HOLT'S RIVETTING FORGE.

Is same size as No. 0, with Rivetting Pan 9 inches diameter. Is also made with box which can be used to hold rivets, or water for cooling Tongs.

Price..... $25 00

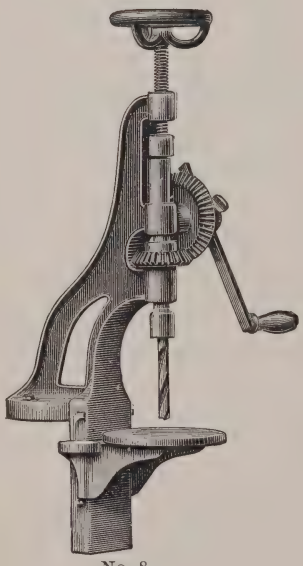
BLACKSMITH'S TIRE DRILLS.



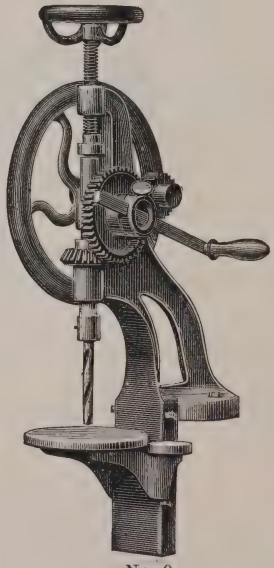
Price, each..... $3 00

UPRIGHT BENCH DRILLS.

WORCESTER.



No. 8.



No. 9.

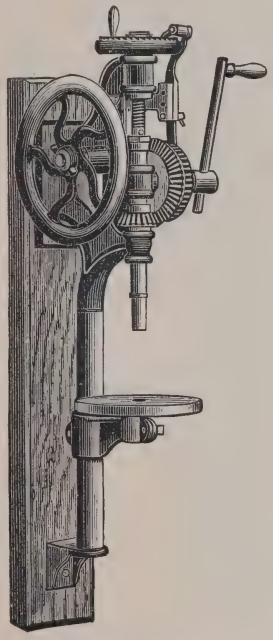
PRICES.

No. 8 Drills $\frac{1}{8}$ to $\frac{5}{8}$ inch holes, weight 55 lbs..... $9 00

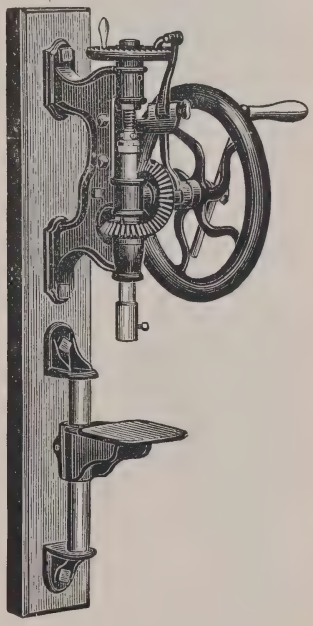
" 9 " $\frac{1}{8}$ to $\frac{7}{8}$ " " " 75 " 11 00

UPRIGHT SELF FEEDING DRILLS.

WORCESTER.



No. 0. Weight 30 lbs.



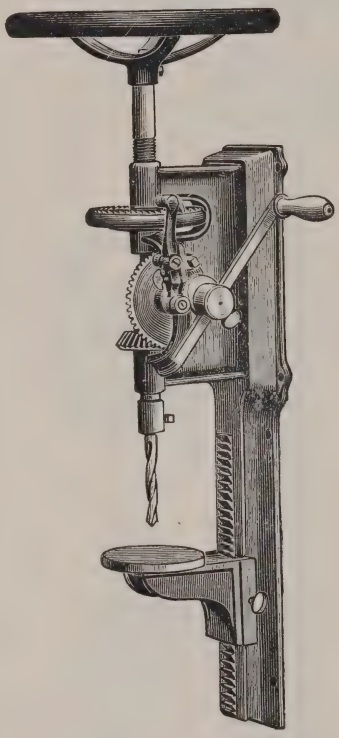
No. 1. Weight 98 lbs.

PRICES.

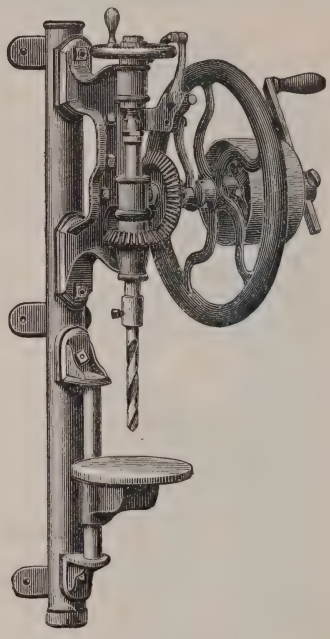
No. 0.	Length 26 inches. Drills $\frac{1}{16}$ to $\frac{3}{8}$ inch Hole.....	$14 00
" 1.	" 42 " " $\frac{1}{8}$ to $\frac{3}{4}$ " "	20 00
	With Pulleys for Power	23 00

UPRIGHT SELF FEEDING DRILLS.

WORCESTER.



The "Boss." Weight 110 lbs.



No. 6. Weight 125 lbs.

PRICES.

The "Boss." All Iron, cast in one piece. It is strong, very light running, and easily handled. The Feed has a run of 4 inches, and three rates of speed. Can be used as a Horizontal, if desired. Drills from $\frac{1}{8}$ to $\frac{7}{8}$ inch Hole. Price..... $18 00

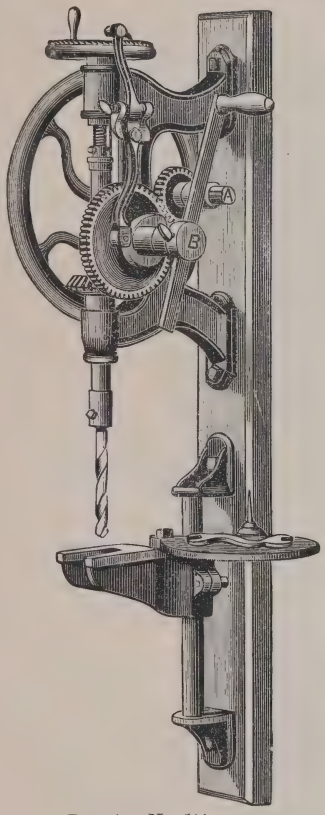
No. 6. Above Cut represents No. 6 for Hand or Power. Price 24 00

Hand Drill only..... " 22 00

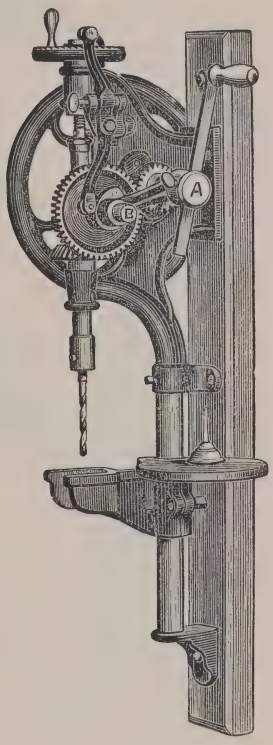
No. 6 has a Tubular Iron Column, Length 42 inches.

UPRIGHT SELF FEEDING DRILLS.

WORCESTER.



Boynton No. 1½.



Boynton No. 2.

The Boynton No. 1½, Drills ⅛ to 1 inch Hole, weight 120 lbs..... $25 00

This Machine has nearly a continuous feed which may be quickly adjusted by a thumb-screw to three rates of speed. A fast or slow motion may be given the Drill by changing the handle from shaft (*A*) to shaft (*B*), as desired by the operator. By this arrangement the capacity of the Drill has been increased nearly one-third.

Arranged for power with one Pulley in place of Balance Wheel without extra charge. One Pulley, with Balance Wheel, $1 50 extra.

The Boynton No. 2, Drills ⅛ to 1¼ inch Hole, weight 160 lbs..... $35 00

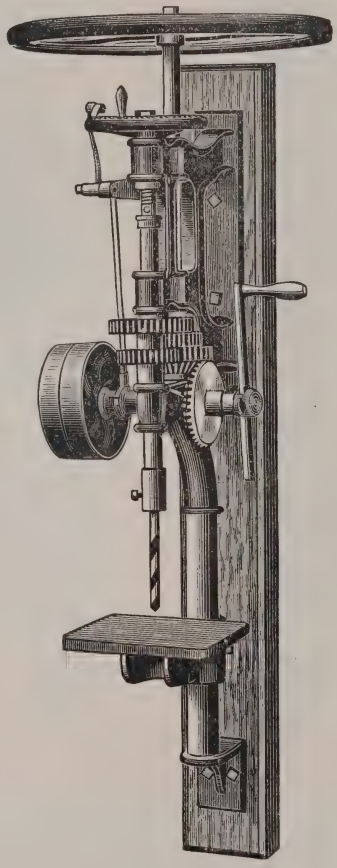
No. 2 is similar to No. 1½, and has all the late improvements. The Swing Table, as applied to these Machines, will be found useful in many ways, and much more convenient than the old method of driving them in and out with a hammer, thereby running the risk of breaking the foot-piece. It is out of the way when not in use, and may be quickly swung into position when wanted.

Arranged for power with one Pulley in place of Balance Wheel without extra charge. One Pulley, with Balance Wheel, $1 50 extra.

UPRIGHT SELF FEEDING DRILLS.

WORCESTER.

No. 3. Weight 250 lbs.

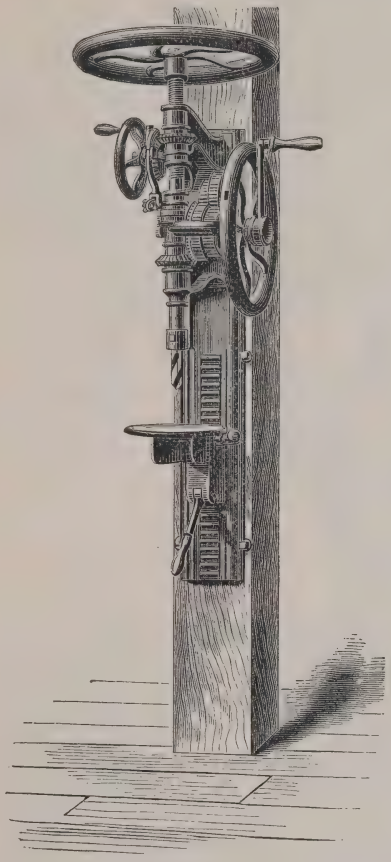


Drills ¼ inch to 1½ inch Hole.

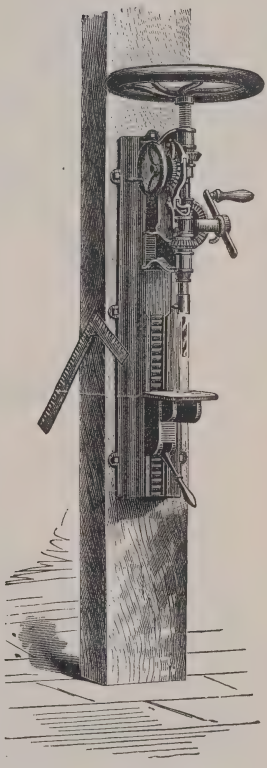
Price, without Pulleys..... $53 00
" with " 57 00

No. 3 has cut Gears, so arranged that a quick or slow motion may be given the Drill as desired for light and heavy work, making it a desirable tool for the machine shop or factory, answering as well as higher cost Machines.

GREEN RIVER DRILLS.



No. 4.



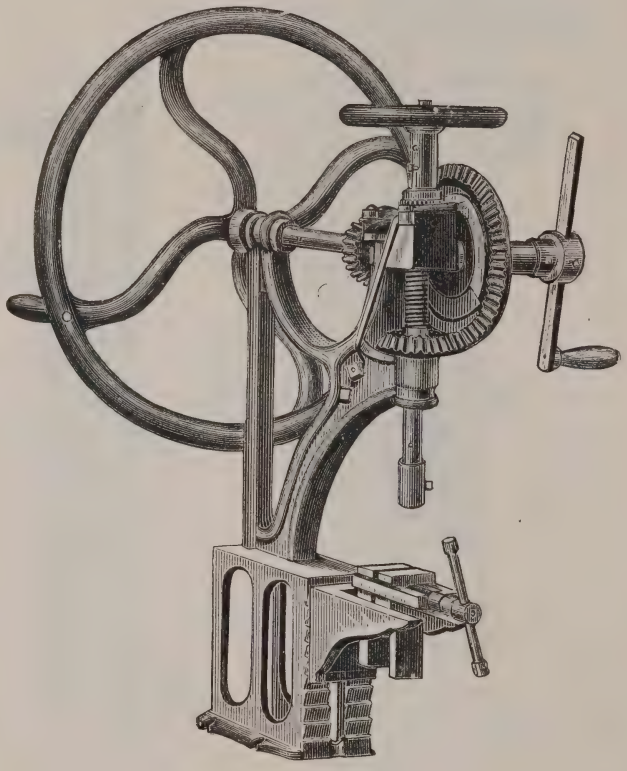
No. 2.

PRICES.

No. 2.	Drills $\frac{3}{4}$ inch Hole	$28 00
" 3.	" 1 " " same style as No. 2	47 00
" 4.	" $1\frac{1}{2}$ " " weight 250 lbs	70 00

COE'S UPRIGHT BENCH DRILLS.

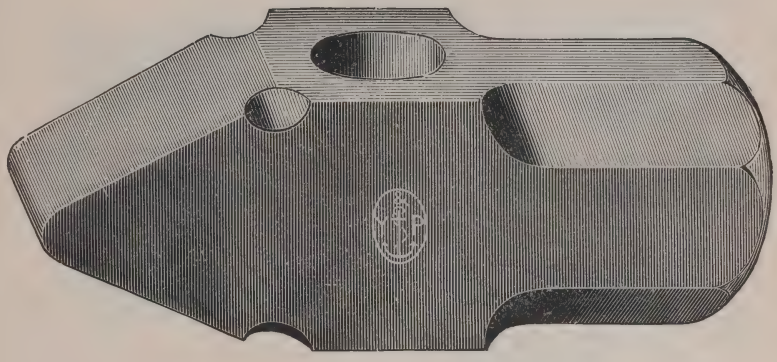
NO. 2.



PRICES.

No. 0.	Weight 100 lbs., without Vise	$25 00
" 1.	" 130 " " "	37 50
" 1.	" 130 " with Vise Attachment	40 00
" 2.	" 200 " " " "	50 00
" 3.	Post Drill Press and Wood Borer	45 00

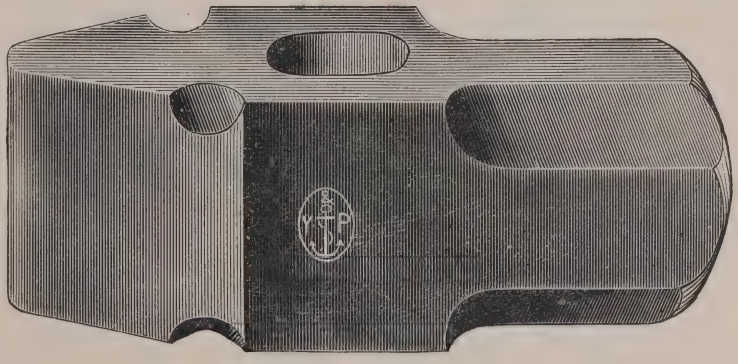
BLACKSMITH'S CROSS PIEN SLEDGES.



PRICES.

Steel Face and Pien, all sizes	per lb	15	cents
Solid Cast Steel, "	"	21	"

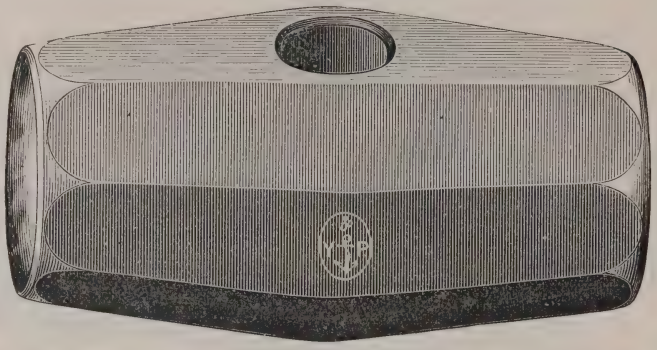
BLACKSMITH'S STRAIGHT PIEN SLEDGES.



PRICES.

Steel Face and Pien, all sizes	per lb	15	cents
Solid Cast Steel, "	"	21	"

HORSE SHOE TURNING SLEDGE.



Solid Cast Steel.....per lb 25 cents

SET HAMMER.

Solid Cast Steel.....per lb 40 cents

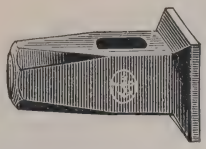
HORSE SHOE TURNING HAMMER.

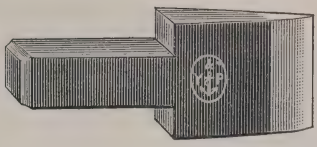
Solid Cast Steel.....each $2 00

HAND COLD CHISELS.

Solid Cast Steel.....per lb 30 cents

FLATTERS AND HARDIES.



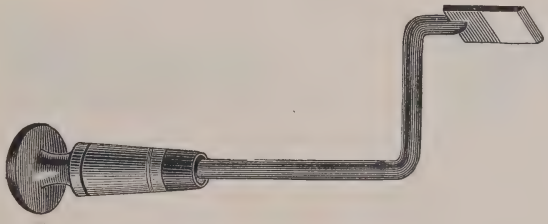


Solid Cast Steel.....per lb 45 cents

BLACKSMITH'S PINCERS.

Cast Steel Jaws.....per doz $12 00
Solid Cast Steel..... " 15 00

BLACKSMITH'S BUTTRESS.

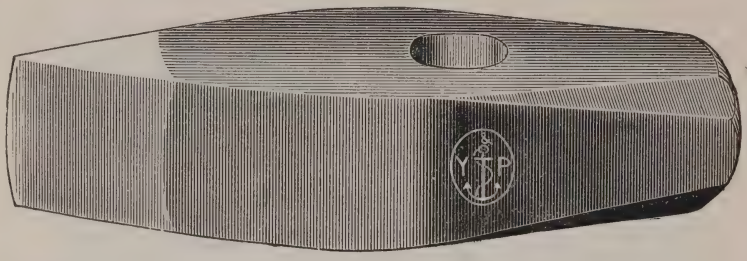


Cast Steel.....per doz $9 00

BLACKSMITH'S TONGS.

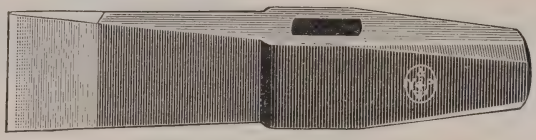
All sizes.....per lb 20 cents

BLACKSMITH'S COLD CHISEL.



Solid Cast Steel.....per lb 35 cents

BLACKSMITH'S HOT CHISEL.



Solid Cast Steel.....per lb 35 cents

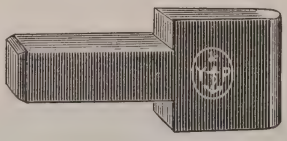
BLACKSMITH'S SWAGES.

Bottom.

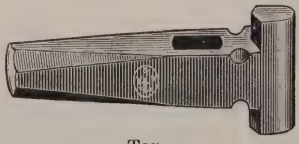
Top.

Solid Cast Steel.....per lb 35 cents

BLACKSMITH'S FULLER.



Bottom.

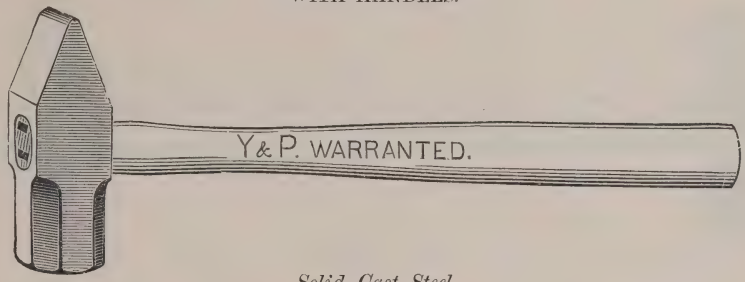


Top.

Solid Cast Steel.....per lb 35 cents

ENGINEER'S HAMMER.

WITH HANDLES.

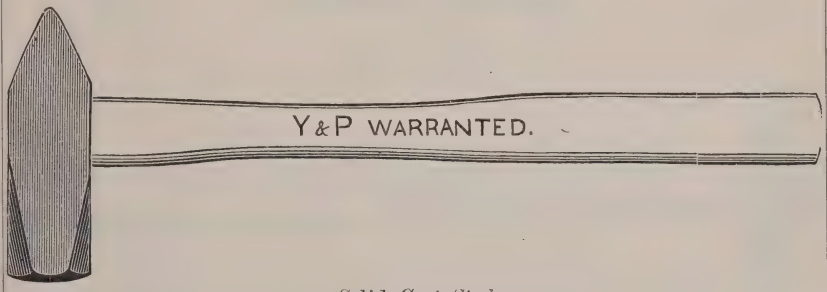


Solid Cast Steel.

Nos.	0	1	2	3	4
Weight	1 lb 9 oz	2 lbs	2 lbs 6 oz	2 lbs 13 oz	3 lbs 8 oz
Price	$8 00	$9 00	$11 00	$13 50	$16 00 doz

BLACKSMITH'S HAND HAMMERS.

WITH HANDLES.

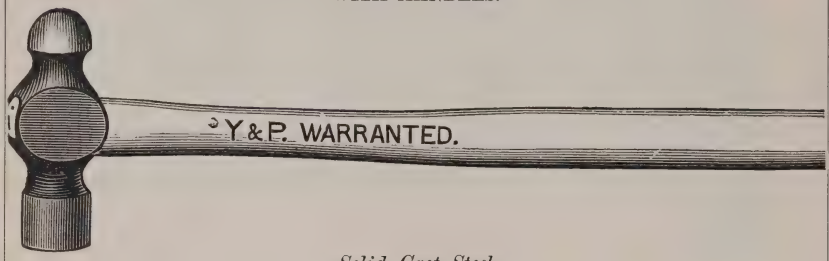


Solid Cast Steel.

Nos.	1	2	3
Weight	2 lbs 6 oz	3 lbs	3 lbs 8 oz
Price	$12 00	$13 50	$16 00 doz

BALL PIEN HAMMERS.

WITH HANDLES.



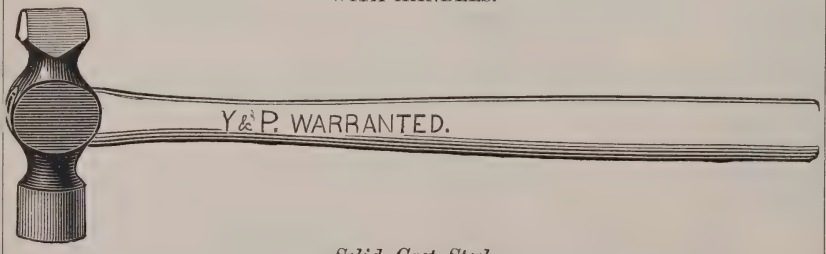
Solid Cast Steel.

Nos.	00	0	1	2
Weight	12 oz	1 lb 2 oz	1 lb 13 oz	2 lbs 2 oz
Price	$10 00	$12 00	$14 00	$16 00 doz

Nos.	3	4	5	6
Weight	2 lbs 10 oz	3 lbs	3 lbs 12 oz	4 lbs 6 oz
Price	$18 00	$21 00	$24 00	$28 00 doz

MACHINIST'S HAMMERS.

WITH HANDLES.

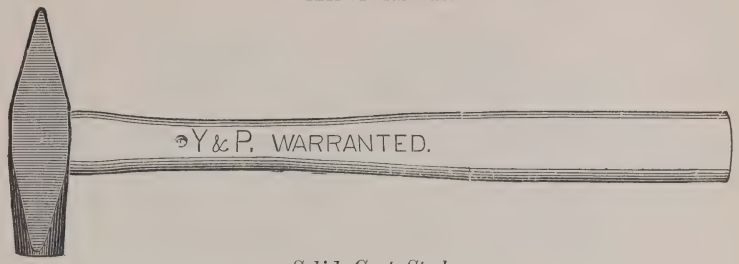


Solid Cast Steel.

Nos.	0	1	2	3	4
Weight	1 lb 2 oz	1 lb 13 oz	2 lbs 2 oz	2 lbs 10 oz	3 lbs
Price	$12 00	$14 00	$16 00	$18 00	$21 00 doz

RIVETTING HAMMERS.

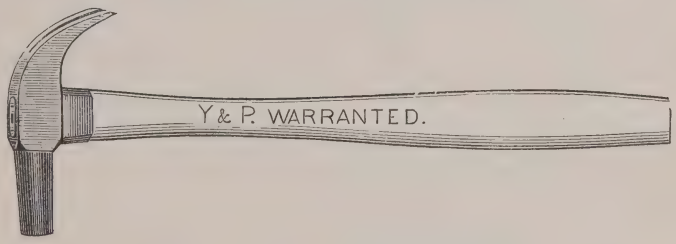
WITH HANDLES.



Solid Cast Steel.

Nos.	0	1	2	3
Weight	6 oz	9 oz	12 oz	1 lb 1 oz
Price	$3 25	$3 75	$4 25	$5 00 doz
Nos.	4	5	6	7
Weight	1 lb 3 oz	1 lb 7 oz	1 lb 9 oz	2 lbs
Price	$5 75	$6 50	$7 25	$8 00 doz

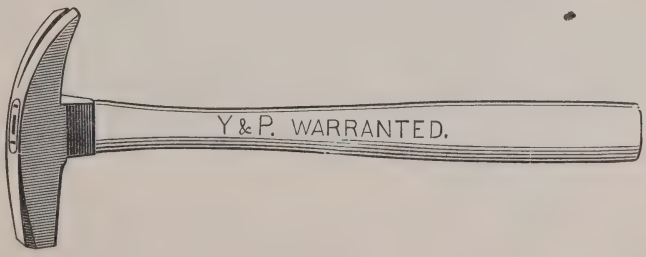
ADZE EYE FARRIER'S HAMMER.



Solid Cast Steel.

Weight 11 oz.....per doz $6 50

BOSTON PATTERN FARRIER'S HAMMER.

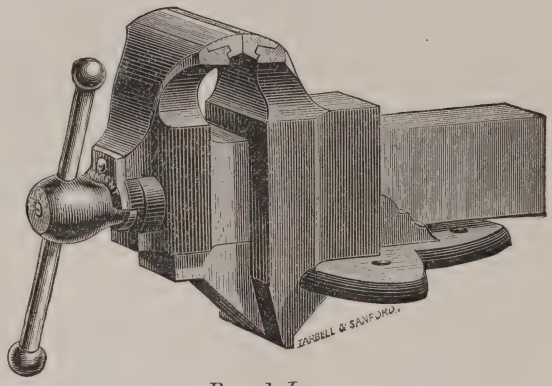


Solid Cast Steel.

Weight 15 oz.....per doz $9 50

PARKER'S PARALLEL VISES.

NO. 2.



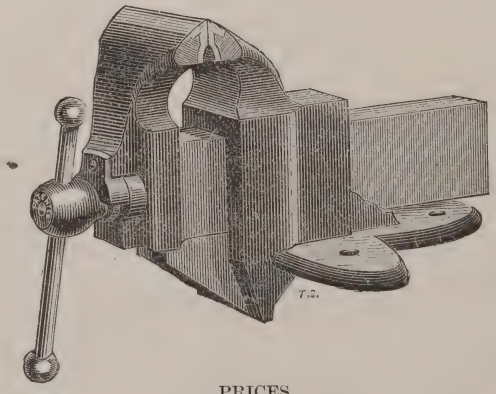
Round Jaws,

PRICES.

No.	000	Jaw	$3\frac{1}{4}$	inch,	weight	23	lbs.	$6 25
"	1	"	$3\frac{5}{8}$	"	"	$31\frac{1}{2}$	"	7 00
"	2	"	$4\frac{1}{4}$	"	"	$41\frac{1}{2}$	"	9 00
"	3	"	$4\frac{3}{4}$	"	"	$59\frac{1}{3}$	"	11 75
"	4	"	$5\frac{3}{8}$	"	"	83	"	16 25
"	5	"	$6\frac{1}{8}$	"	"	120	"	24 00
"	6	"	$8\frac{1}{8}$	"	"	237	"	50 00

PARKER'S PATENT FILER'S VISE.

NO. 42.

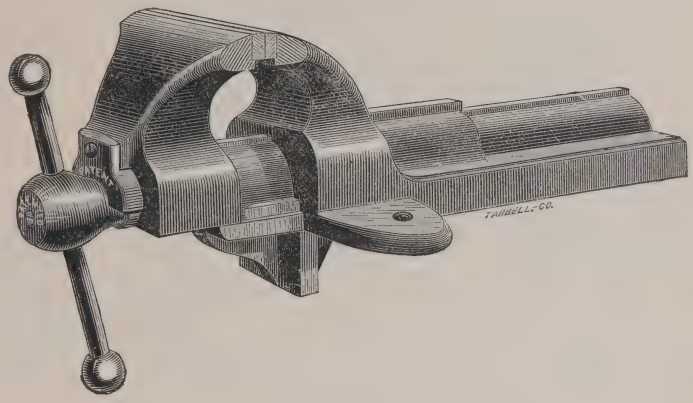


PRICES.

No.	42	Jaws	4	inch,	weight	33	lbs.	$7 25
"	44	"	4	"	"	37	" Swivel Seat	8 75

PARKER'S OVAL SLIDE VISES.

NO. 34.

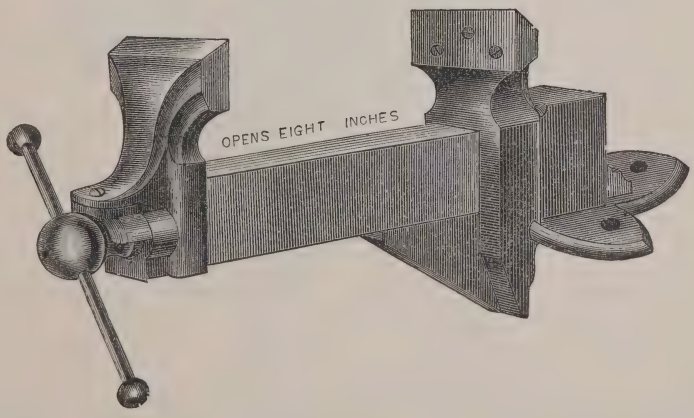


PRICES.

No. 30	Jaws $2\frac{5}{8}$	inch,	weight	$8\frac{1}{2}$	lbs.			$2 50
" 31	" 3	"	"	13	"			3 00
" 32	" $3\frac{1}{4}$	"	"	19	"			4 25
" 33	" $3\frac{1}{2}$	"	"	22	"			4 75
" 34	" 4	"	"	24	"			6 50
" 35	" $4\frac{1}{2}$	"	"	35	"			9 50
" 36	" 5	"	"	59	"			12 00

PARKER'S COACH MAKER'S VISE.

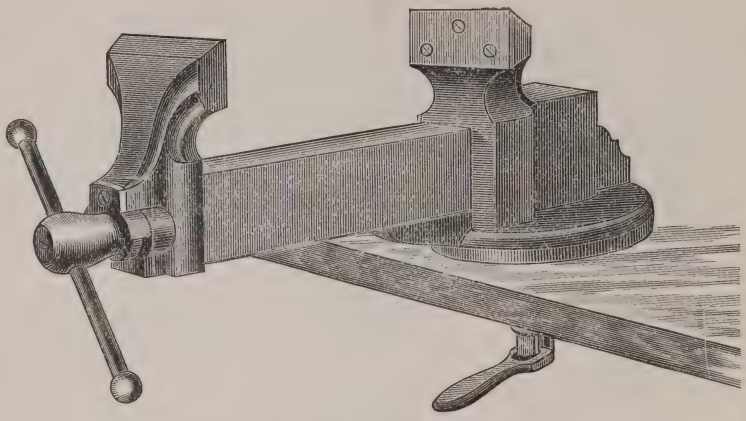
NO. 40.



No. 40 4 inch Jaw. Opens 8 inches..... $10 25

PARKER'S COACH MAKER'S VISE.

NO. 46.

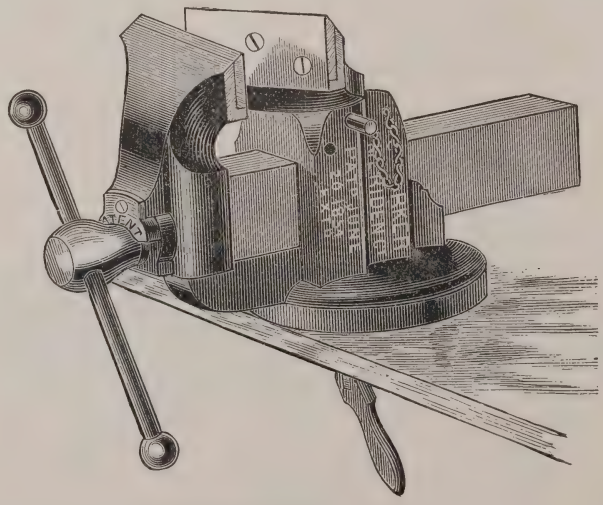


SWIVEL SEAT.

No. 46 Jaws 4 inch. Opens 8 inches $12 50

PARKER'S COACH MAKER'S VISE.

NO. 41.

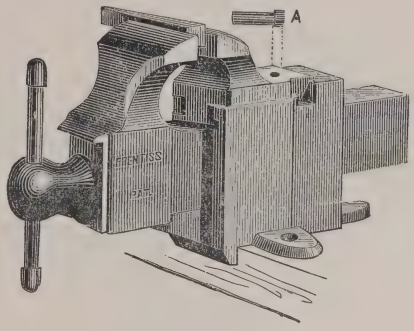


WITH SWIVEL SEAT AND JAW.

No. 41 Jaws 4½ inch. Opens 9 inches $14 00

PRENTISS' PATENT SWIVEL JAW VISES.

STATIONARY BOTTOM.

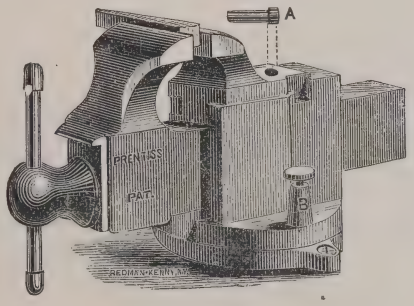


PRICES.

Width Jaw	$1\frac{3}{4}$	inch,	weight	2	lbs.,	opens	$1\frac{3}{4}$	inch	.....	$3 50
" "	2	"	"	$3\frac{1}{2}$	"	"	2	"	.....	4 00
" "	$2\frac{5}{8}$	"	"	$13\frac{1}{2}$	"	"	$3\frac{1}{3}$	"	.....	5 50
" "	$3\frac{1}{2}$	"	"	28	"	"	$4\frac{3}{4}$	"	.....	7 00
" "	$4\frac{1}{3}$	"	"	54	"	"	6	"	.....	10 50
" "	$5\frac{1}{4}$	"	"	96	"	"	8	"	.....	17 00
" "	6	"	"	146	"	"	9	"	.....	24 00
" "	7	"	"	184	"	"	11	"	.....	30 00

PRENTISS' PATENT SWIVEL JAW VISES.

SWIVEL BOTTOM.

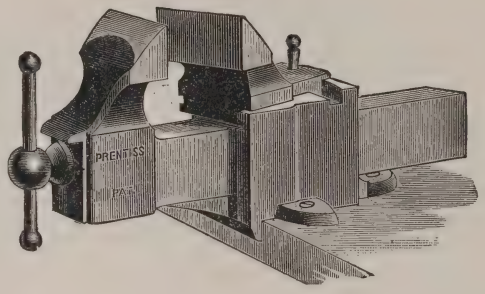


PRICES.

Width Jaw	$1\frac{3}{4}$	inch,	weight	$2\frac{3}{4}$	lbs.,	opens	$1\frac{3}{4}$	inch	.....	$4 50
" "	2	"	"	$4\frac{1}{2}$	"	"	2	"	.....	5 00
" "	$2\frac{5}{8}$	"	"	17	"	"	$3\frac{1}{3}$	"	.....	6 75
" "	$3\frac{1}{2}$	"	"	32	"	"	$4\frac{3}{4}$	"	.....	8 50
" "	$4\frac{1}{3}$	"	"	65	"	"	6	"	.....	12 50
" "	$5\frac{1}{4}$	"	"	109	"	"	8	"	.....	19 00
" "	6	"	"	168	"	"	9	"	.....	27 00
" "	7	"	"	207	"	"	11	"	.....	35 00

PRENTISS' COACH MAKER'S VISES.

SWIVEL JAW.



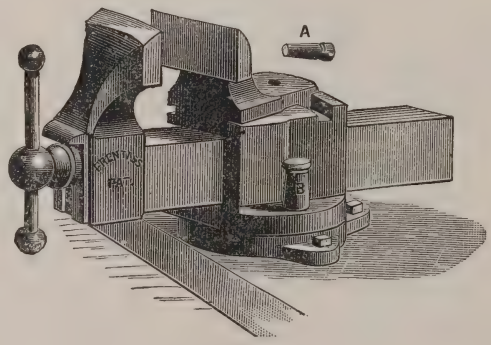
Stationary Bottom.

PRICES.

Jaw 3½ inch, weight 30 lbs., opens 7 inches.....	$8 00
" 4½ " " 59 " " 9½ "	11 00

PRENTISS' COACH MAKER'S VISES.

SWIVEL JAW.



Swivel Bottom.

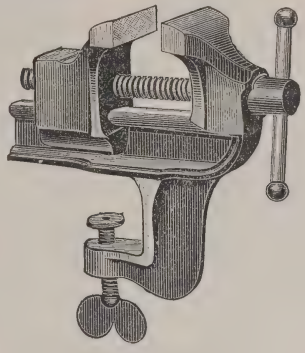
PRICES.

Jaw 3½ inch, weight, 34 lbs., opens 7 inches.....	$9 50
" 4½ " " 67 " " 9½ "	13 00

SIMPSON ADJUSTABLE VISES.

The leading feature of the Simpson Vise is its *quick adjustment*, while retaining all the advantages of the best screw vise—points which are not found combined in any other vise.

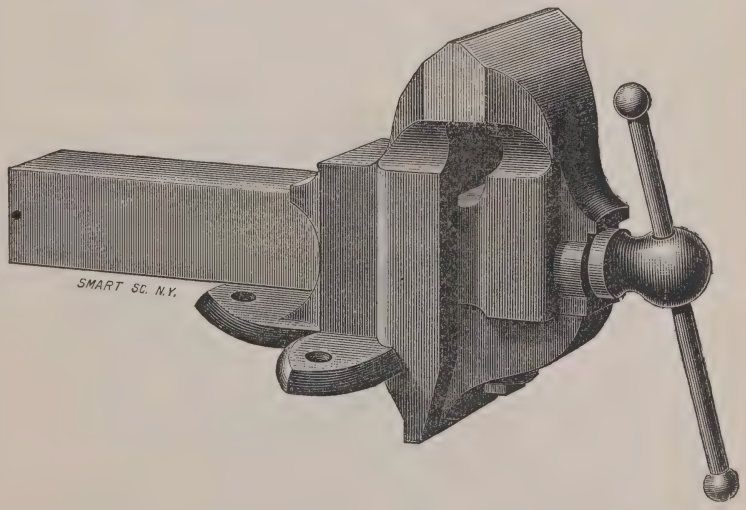
It is operated in the same manner as an ordinary screw vise, or it can be instantly opened and closed the full length by a single movement of the hand, without the use of the screw—the screw being used merely to give the grip, after adjusting the jaws to the work.



AMATEUR VISE.

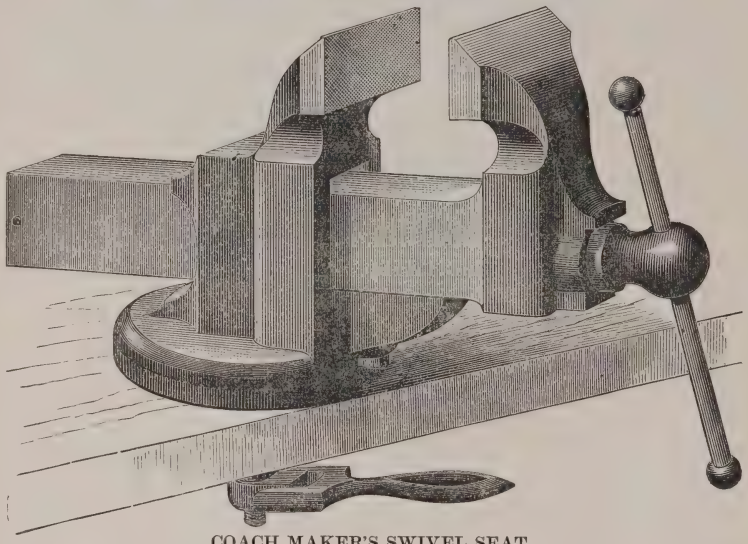
No. 60	Jaw 1½ inch.	Opens 1⅝ inches.	Weight 1⅞ lbs.....	$1 00
" 62	" 2 "	" 2¼ "	" 3¼ "	1 75

STATIONARY COACH MAKER'S VISE.



No. 40	Jaws 4 inches.	Opens 8½ inches.	Weight 41 lbs....	$10 00
" 41	" 4½ "	" 10½ "	" 49 "	11 50

SIMPSON'S ADJUSTABLE VISES.

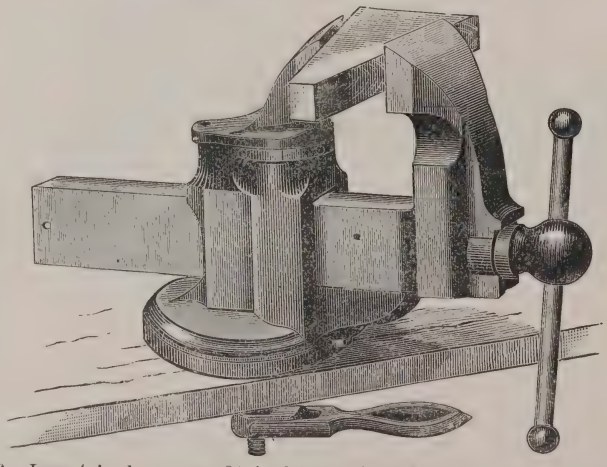


COACH MAKER'S SWIVEL SEAT.

No. 42 Jaw 4 inch, opens 8½ inches, weight 48 lbs..... $11 50
" 43 " 4½ " " 10½ " " 58 " 13 00

SWIVEL COACH MAKER'S VISE.

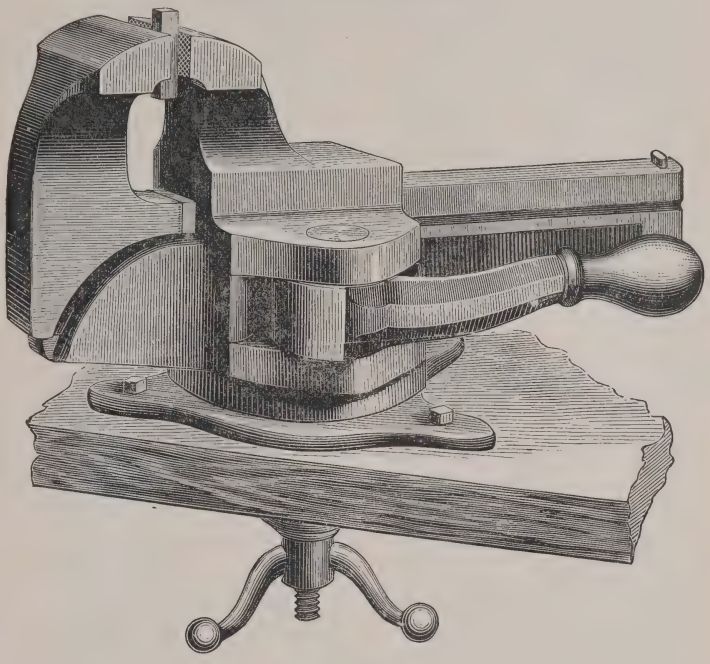
WITH SWIVEL JAW.



No. 46 Jaw 4 inch, opens 8½ inches, weight 52 lbs..... $13 00

STEVENS' PATENT VISES.

SMOOTH OR ROUGH JAWS.



PRICES.

Width of Jaw.	opens	Price Flat Vise	Price Swivel Vise	Weight Flat Vise	Weight Swivel Vise
2 in	2¼ in	$3 00	$3 75	2 lbs	3 lbs
2¾ "	3 "	5 50	6 50	12 "	14 "
3½ "	5 "	9 00	10 50	35 "	42 "
4½ "	6½ "	12 50	14 50	60 "	66 "
5½ " Extension Handle	9 "	22 00	26 00	110 "	120 "
6½ " " "	11 "	33 00	39 00	160 "	175 "
9½ " " "	14 "	140 00	150 00	380 "	420 "

COACH AND WOOD WORKERS' VISES.

	Opens.	Flat.	Swivel.	Flat.	Swivel
3½ inch Vise	8 inches	$11 00	$12 50	43 lbs	50 lbs
4½ " "	11 "	15 50	17 50	70 "	75 "

WAGON HARDWARE.

WAGON BOX STRAP BOLT.

STANDARD LIST.

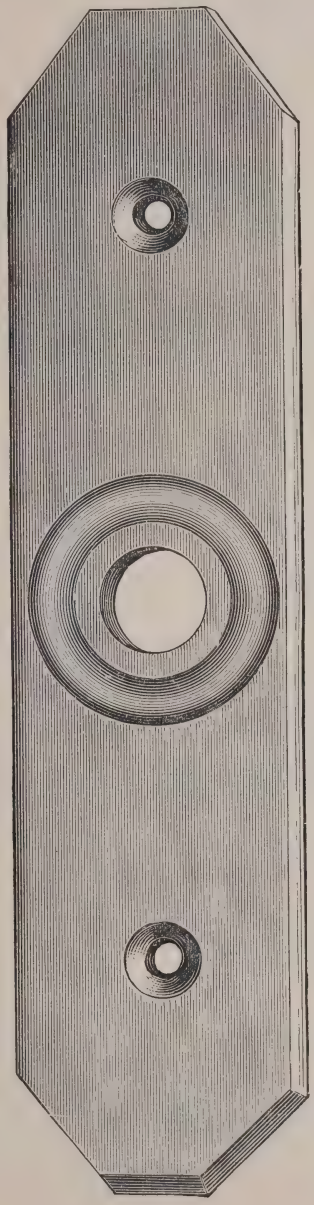
Wagon Box Strap Bolts,	10	in long by	$\frac{7}{16}$	at screw end,	60c	per set of	8	bolts
"	12	"	$\frac{7}{16}$	"	70	"	8	"
"	10	"	$\frac{1}{2}$	"	75	"	8	"
"	12	"	$\frac{1}{2}$	"	75	"	8	"
"	10	"	$\frac{9}{16}$	"	75	"	8	"
"	12	"	$\frac{9}{16}$	"	80	"	8	"
"	14	"	$\frac{9}{16}$	"				
"	10	"	$\frac{5}{8}$	"	1 00	"	8	"
"	12	"	$\frac{5}{8}$	"				
"	14	"	$\frac{5}{8}$	"	1 15	"	8	"
"	16	"	$\frac{5}{8}$	"	1 25	"	8	"
"	18	"	$\frac{5}{8}$	"	1 45	"	8	"
"	20	"	$\frac{5}{8}$	"	1 60	"	8	"
"	22	"	$\frac{5}{8}$	"	1 75	"	8	"
"	24	"	$\frac{5}{8}$	"	1 90	"	8	"

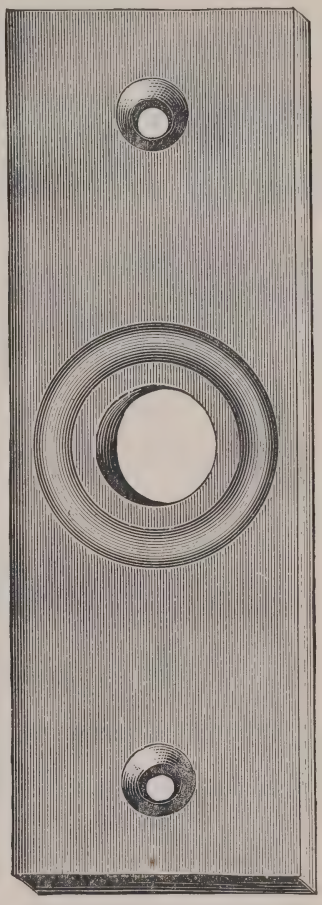
Discount.....per cent.

WAGON TONGUE CAP.

Price.....each 15 cents

PATENT WROUGHT IRON BOLSTER PLATES.





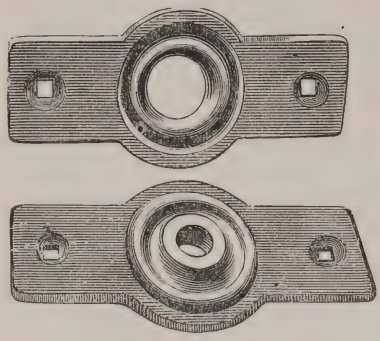
STANDARD LIST.

PRICE PER SET.

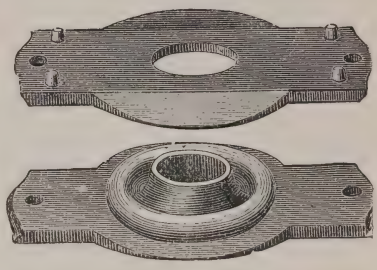
2⅜	in.	wide,	12	in.	long,	55	cents
3	"	"	12	"	"	60	"
3¼	"	"	12	"	"	70	"
3½	"	"	12	"	"	75	"

Discount.....per cent. net.

CAST IRON BOLSTER PLATES.



Common.



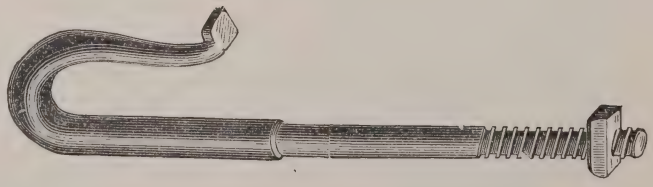
Improved.

No. 1,	Common,	9½ inches	per pair	45 cents
" 2,	"	11½ "	"	50 "
" 3,	Improved	8 "	"	50 "
" 4,	"	10 "	"	60 "
" 5,	"	10¾ "	"	70 "

WAGON BRAKE RATCHETS.

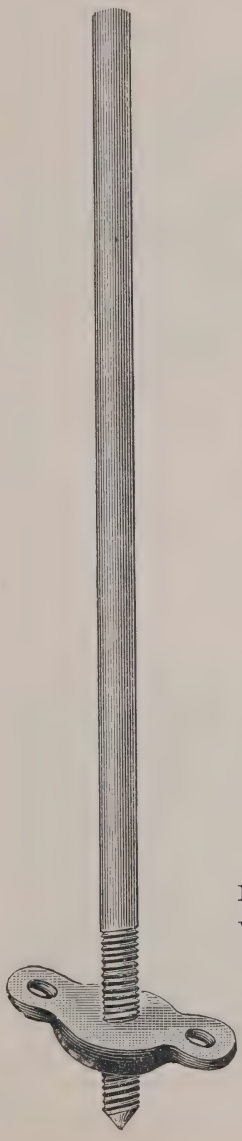
Price, with Guard ..... each 32 cents
" without " " ..... " 12½ "

STAY CHAIN BOLT.

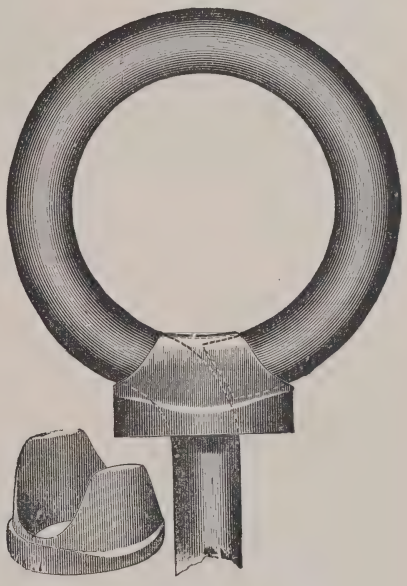


7/16 inch ..... price each 6 cents

WAGON BOX OR END GATE RODS



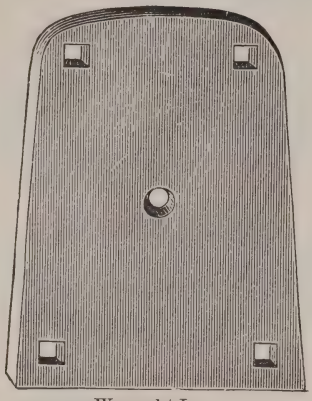
WITH PATENT COLLAR.



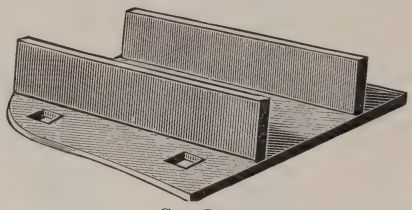
PRICE LIST.

Narrow Track	each	11 cents
Wide "	"	12 "

COUPLING OR REACH PLATES.



Wrought Iron.

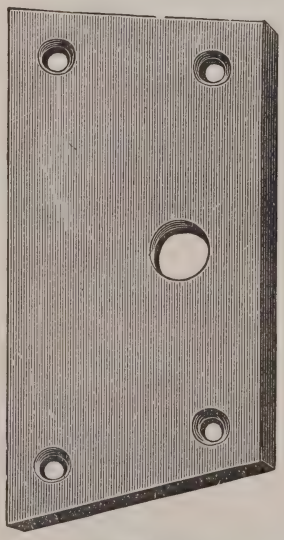


Cast Iron.

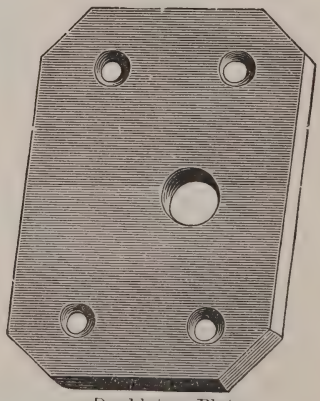
PRICES.

No. 1 Cast Iron for 3½ Reach	each	30	cents
" 2 " " " 4 "	"	35	"
" 3 " " " 4½ "	"	40	"
Wrought Iron	per lb	6	"

TONGUE AND DOUBLETREE PLATES.



Tongue Plate.

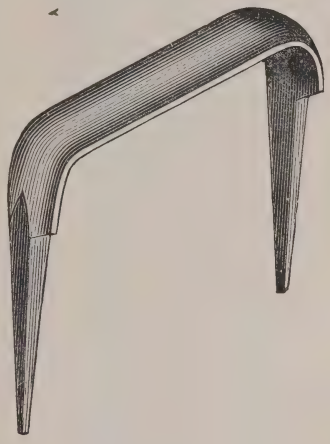


Doubletree Plate.

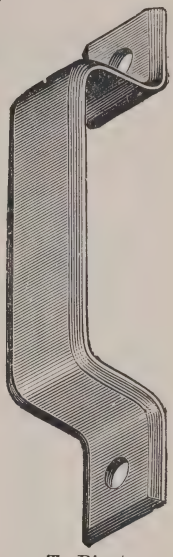
WROUGHT IRON.

Tongue Plates	per lb	8	cents
Doubletree Plates	"	8	"

WAGON BOX STAPLES.



To Clinch.

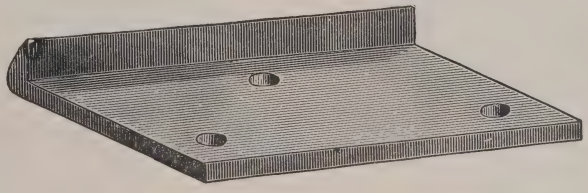


To Rivet.

PRICES.

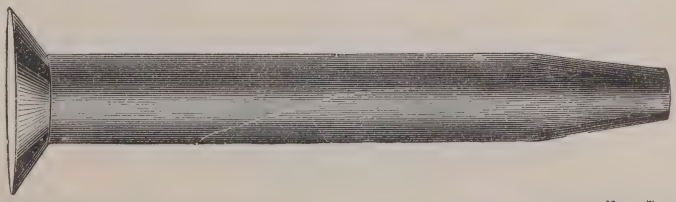
To Clinch 1¼ to 2 inch.....per hundred $1 00
To Rivet 1¼ to 2 " ..... " 1 10

WAGON BOX RUB IRONS.



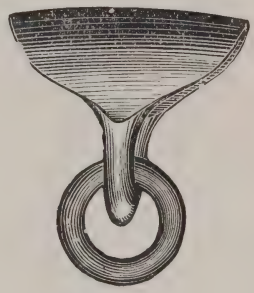
Cast Iron.....per pair 12 cents
Wrought Iron..... " 15 "

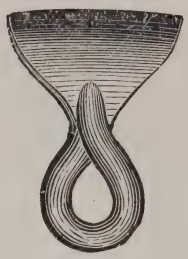
WAGON KING BOLTS.



⅞ to 1¼ inch.....per lb 7 cents

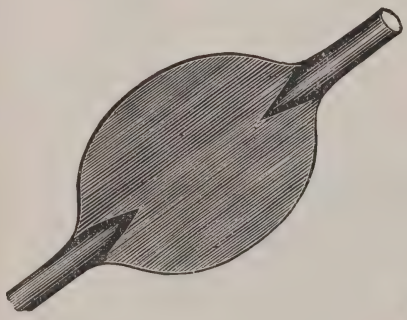
SINGLETREE CENTER CLIPS.



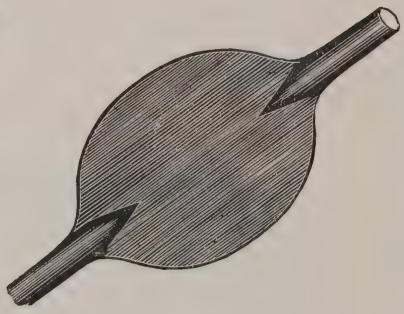


$\frac{9}{16}$ inch Clip with $\frac{7}{16}$ inch Ring	each	10 cents
$\frac{5}{8}$ " " " $\frac{1}{2}$ " "	"	11 "
$\frac{9}{16}$ " " welded and twisted	"	8 "
$\frac{5}{8}$ " " " " "	"	$8\frac{1}{2}$ "

SINGLETREE CENTER CLIPS.



No. 2.



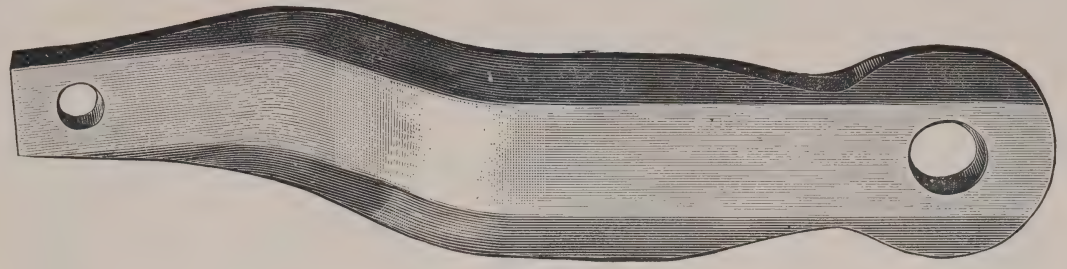
No. 3.

No. 2	Center Clip $\frac{9}{16}$ Iron	each	7 cents
" 3	" " $\frac{5}{8}$ "	"	$8\frac{1}{2}$ "

SINGLETREE END CLIPS.

No. 1	End Clip $\frac{7}{16}$ Iron	each	6 cents

WROUGHT IRON HAMMER STRAPS.



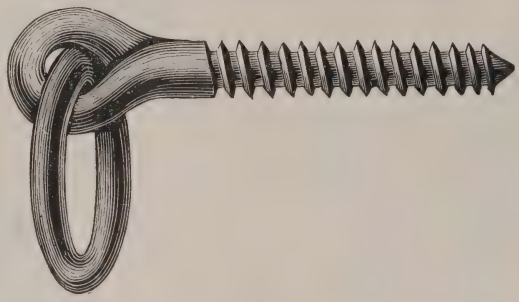
TWO SIZES.

Light Pattern.....each 8 cents
Heavy " ..... " 9 "

WROUGHT IRON NECKYOKE PLATES.

Price per lb..... 8 cents

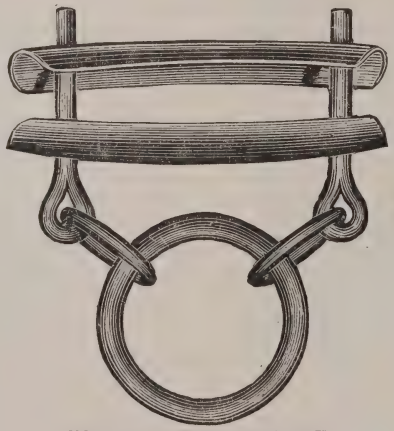
NECKYOKE EYE AND RING.



PRICES.

$\frac{1}{2}$ inch Eye with $\frac{3}{8}$ inch Ring	each	$9\frac{1}{2}$	cents
$\frac{9}{16}$ " " " $\frac{7}{16}$ " "	"	$10\frac{1}{2}$	"

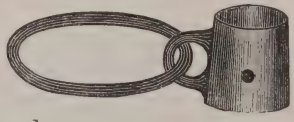
NECKYOKE IRONS.



WITH PLATES COMPLETE.

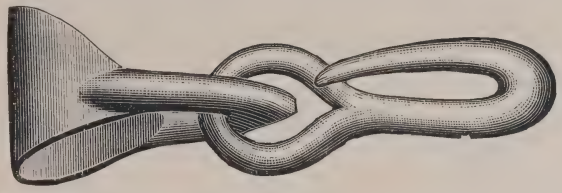
Price per set, complete ..... 22 cents

NECKYOKE FERRULE WITH RING.



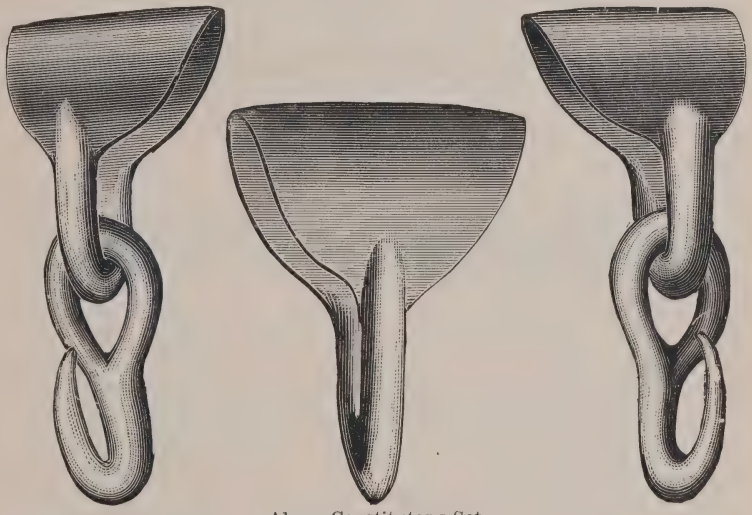
$1\frac{1}{4}$ inch Ferrule, large end	each	7	cents
$1\frac{3}{8}$ " " " "	"	7	"
$1\frac{1}{2}$ " " " "	"	8	"

SINGLETREE END CLIP WITH HOOK.



$\frac{7}{16}$ inch Clip and $\frac{8}{8}$ inch Hook.....each 10 cents

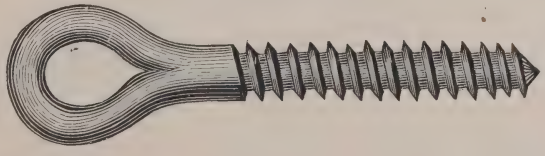
SINGLETREE IRONS.



Above Constitutes a Set.

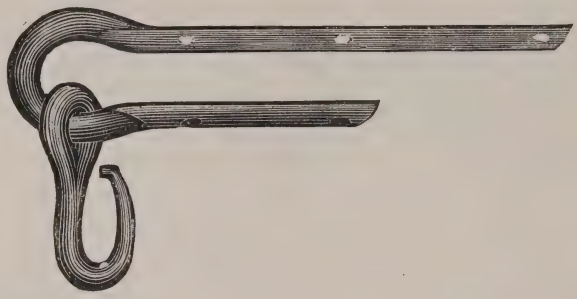
Price per Set, Plow Singletrees..... 30 cents
" " Wagon " ..... 30 "

NECKYOKE EYES.



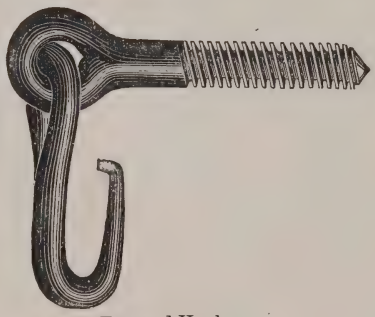
$\frac{1}{2}$ inch Iron.....each 6 cents
$\frac{9}{16}$ " " ..... " $6\frac{1}{2}$ "

SINGLETREE STRAP AND HOOK.

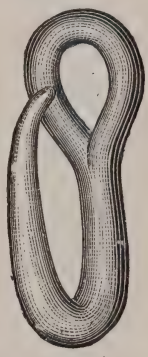


Price per Set of Four Pieces with Hooks..... 50 cents
" " " " without Hooks..... 25 "

SINGLETREE SCREW EYE AND HOOKS.



Eye and Hook.



Singletree Hook.

Screw Eye with Hook, $\frac{1}{2}$ inch Eye, $\frac{8}{8}$ inch Hook.....each 11 cents
" " " " $\frac{9}{16}$ " " $\frac{7}{16}$ " " ..... " 12 "
Singletree Hook..... " 6 "

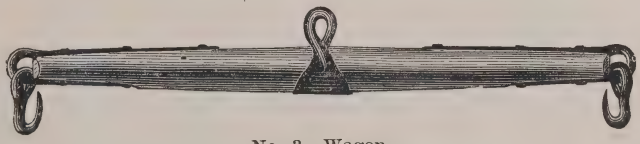
SINGLETREE FERRULE WITH HOOK.

Ferrule $1\frac{1}{4}$ inch large end.....each $7\frac{1}{2}$ cents
" $1\frac{1}{8}$ " " " ..... " $7\frac{1}{2}$ "
" $1\frac{1}{2}$ " " " ..... " $7\frac{1}{2}$ "

FINISHED SINGLETREES.

No. 1.—Wagon.

No. 2.—Wagon.



No. 3.—Wagon.

No. 4.—Plow.

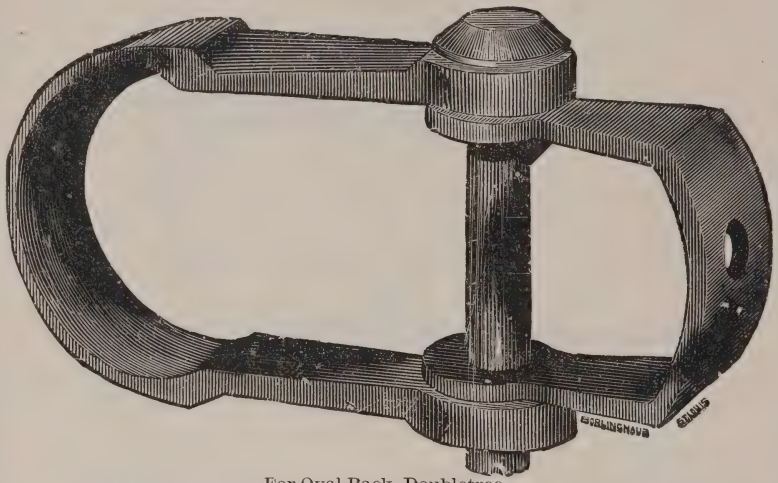
Price Nos. 1, 2 and 3, Wagon	per doz	$5 00
Southern Pattern, Plow	"	3 00
Western " "	"	3 50

FINISHED WAGON NECKYOKES.

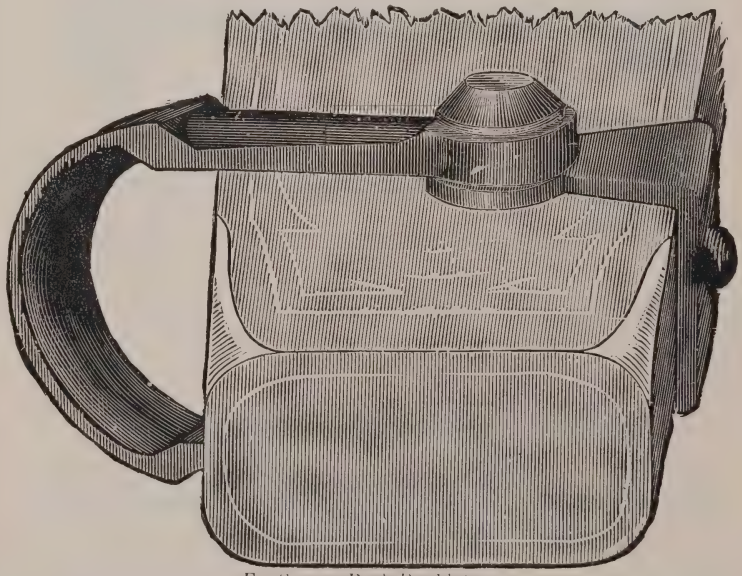
Ironed Complete	per doz	$6 50

PATENT LOCK-PIN CLEVISE AND CLIP.

WROUGHT IRON.



For Oval Back Doubletree.

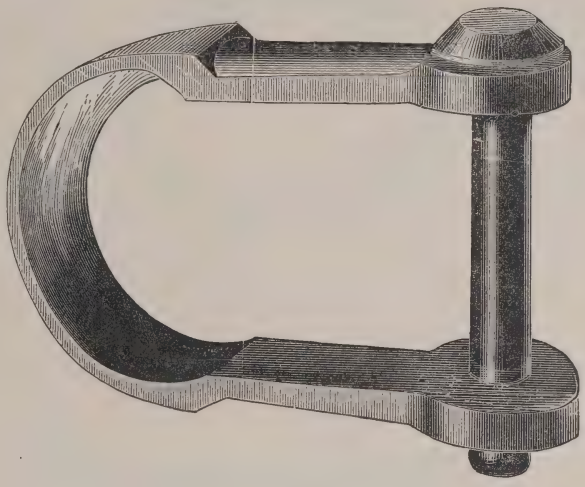


For Square Back Doubletree.

Price, Square Back.....per lb 7½ cents
" Oval " ..... " 7½ "

WROUGHT IRON CLEVISE.

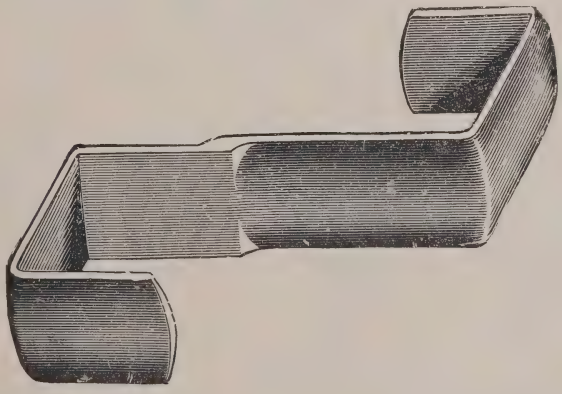
With Key Pin or Round Pin.



PRICES.

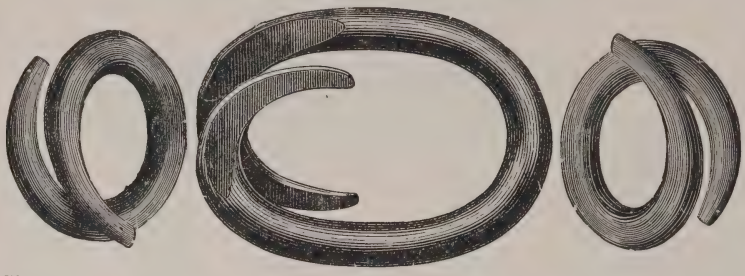
Heavy Weight,	18	ounces	per lb	7½	cents
Medium "	15	"	"	7½	"
Light "	12	"	"	7½	"

WROUGHT IRON SEAT SPRING HOOKS.



2½, 3, 3½ and 4 inches long.....Price per lb 7½ cents

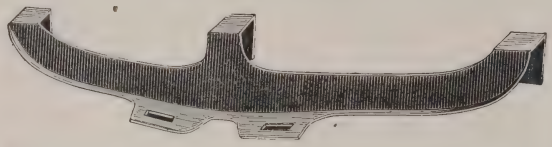
WROUGHT OPEN LINKS.



Sizes	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$ inch
Price per lb	20	15	14	13	13	13 cents

EXCELSIOR SEAT REST.

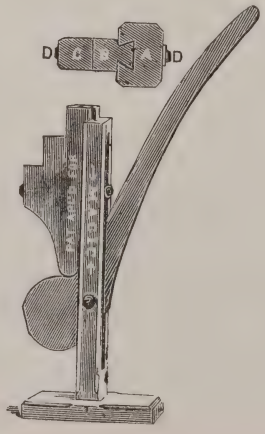
For Wagon Seat Springs.



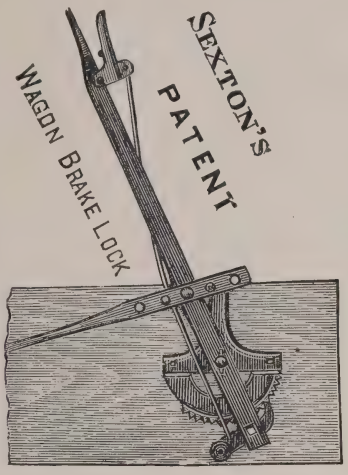
Price per pair..... 50 cents

MAGIC WAGON JACK.

Warranted to give Satisfaction.



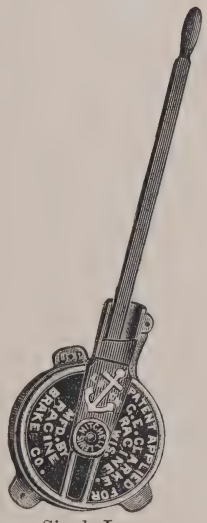
Price, each..... $1 00



We recommend this Lock for parties desiring a good serviceable lock; have sold them largely, and they invariably give excellent satisfaction.

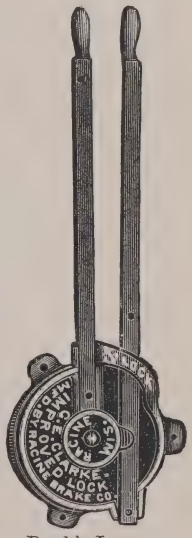
Price, each..... $1 00

ANCHOR WAGON LOCKS.



Single Lever.

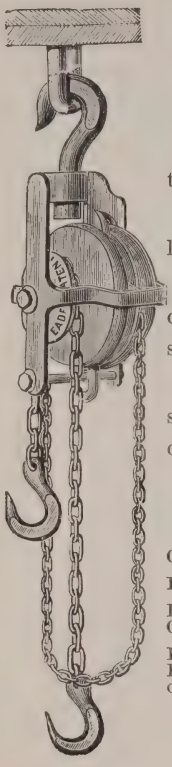
The working parts are entirely covered, keeping out dust and rain. It is perfectly automatic, there being no springs to get out of order. It is the cheapest good lock in the market. and we guarantee them to give satisfaction.



Double Lever.

PRICES.

Single Lever.....each 60 cents
Double " ..... " 75 "



DIFFERENTIAL PULLEY BLOCKS.

EADES' PATENT.

Very easy to work. One man can lift a ton. They sustain the load, and cannot slip.

The Lifting Chain has a hook at each end, and no lowering is required for a fresh load.

The Hand Chain is independent of the Lift Chain, and can be worked at an angle, thus enabling the workman to stand from under the load.

Having two chains there is less wear upon the links and sheaves, and they consequently last much longer than the ordinary Differential Pulley.

PRICE LIST.

Capacity	¼	½	1	1½	2	3	4 tons
Price, complete	$20 00	25 00	30 00	40 00	50 00	70 00	95 00
Regular Length Chain will raise	7	7	8	9	10	10	11 ft
Extra Lengths. For every foot of lift includi'g Hand Chain	$1 00	1 20	1 50	1 65	1 80	2 00	2 30

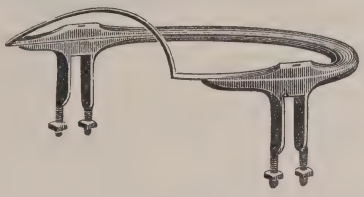
Report of Testing Various Pulley Blocks, by John Millward, C. E.

The whole of the Blocks were supplied by the Makers as one ton Blocks for lifting eight feet. An actual dead weight of one ton was in each case raised and lowered, and the forces measured by dead weights.

Description of Block.	Percentage of useful effect in lifting.	Force required to lift one ton.	Force required to lower one ton	Ratio of speed of hand and lift chain.	Weight of blocks and chain.
Eades' Patent.....	46.5	130 lbs	27 lbs	37 to 1	45 lbs
Weston's Different'l	27.8	268 "	112 "	30 to 1	55 "
Pickering's Patent.	19.3	231 "	118 "	35 to 1	64 "
Cherry's Patent....	19.0	298 "	130 "	40 to 1	50 "
Moore's Patent....	19.0	257 "	101 "	46 to 1	70 "

CARRIAGE HARDWARE.

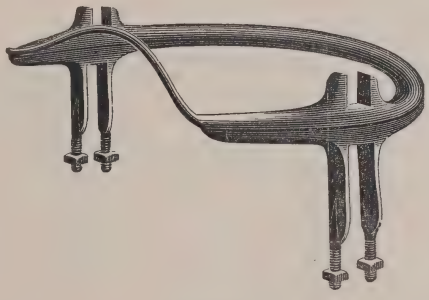
PLAIN OR CINCINNATI FIFTH WHEEL.



PRICES.

$\frac{5}{8}$ inch Iron, any diameter	per doz	$6	50
$\frac{3}{4}$ " " " "	"	7	50
$\frac{7}{8}$ " " " "	"	13	50

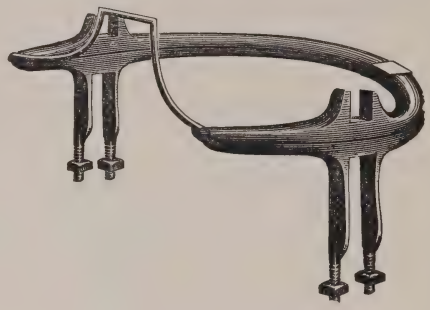
DERBY FIFTH WHEELS.



PRICES.

$\frac{5}{8}$ inch Iron, any diameter	per doz	$8	00
$\frac{3}{4}$ " " " "	"	9	00
$\frac{7}{8}$ " " " "	"	15	00

DERBY SPOT FIFTH WHEEL.



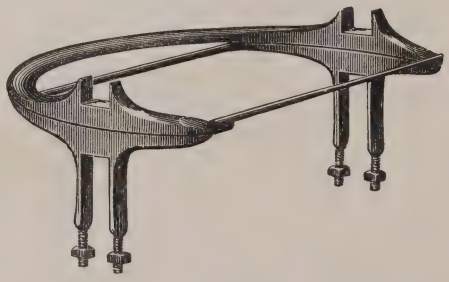
This Wheel has raised flanges on the top section to support the head-block, and center flat spot for reach. The clips are forged from the best Norway iron, fitted and finished perfect. and a first-class wheel in every respect.

PRICES.

⅝ inch Iron, any diameter	per doz	$9 00
¾ " " " "	"	10 00

DERBY SPOT FIFTH WHEEL.

With Cross Bar.



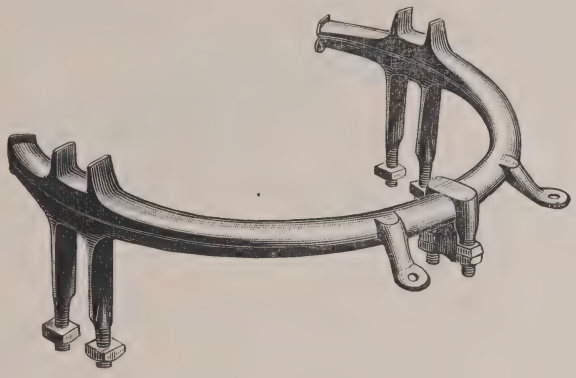
. As shown by the above cut, the bottom circle does not clear around. It extends back of clip about three inches, and then connects by a straight bar.

PRICES.

⅝ inch Iron, any diameter	per doz	$10 00
¾ " " " "	"	11 00

PATENT BENT PERCH FIFTH WHEEL.

FOR SIDE BAR WAGONS.

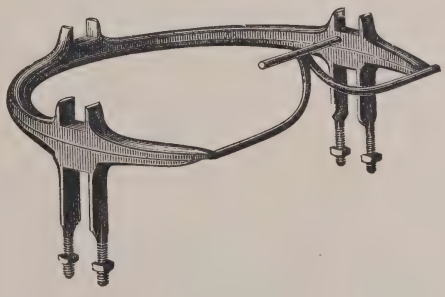


With Anti-Rattler.

PRICES.

$\frac{5}{8}$ inch Iron, any diameter	per doz	$18 00
$\frac{3}{4}$ " " " "	"	20 00

M'GUIRE'S PATENT FIFTH WHEELS.

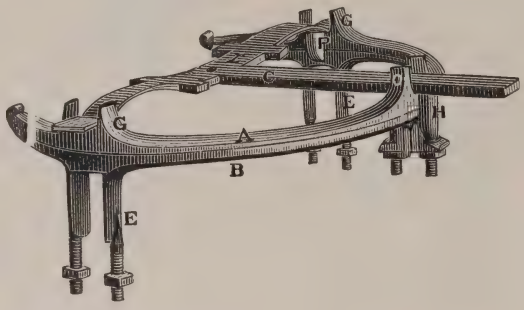


This circle has an extra clip raised on the top section for the perch to rest in, which gives it a great support and forming a stay on each side prevents it from breaking. Made from the best Norway Iron, and polished bright all over.

PRICES.

$\frac{5}{8}$ inch Iron, any diameter	per doz	$10 00
$\frac{3}{4}$ " " " "	"	11 00

M'GUIRE'S COMBINED FIFTH WHEEL AND PERCH PLATE.



This circle is furnished with head-block, perch plate and anti-rattler, all complete. The top circle has three forms of clips raised to support the perch and head-block. The rattler (H) is forged solid on the under side of the perch plate, and has crossbar with rubber packing and steel facing, fitted to the bottom circle, which entirely prevents the circle from rattling and shifting, also locking perch plate and circle together. The circle is well fitted and finished. and polished bright all over.

PRICES.

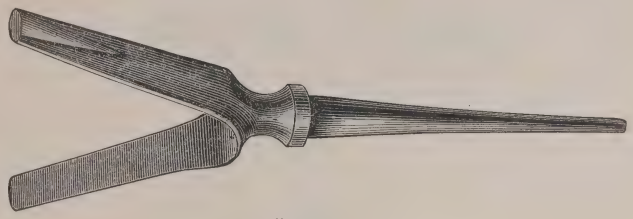
$\frac{5}{8}$ inch Iron, any diameter	per doz	$18 00
$\frac{3}{4}$ " " " "	"	19 00

CURTISS' FIFTH WHEEL ANTI-RATTLER.

PRICES.

For Fifth Wheels made of	$\frac{5}{8}$ Iron	per doz	$5 00
" " "	$\frac{11}{16}$ "	"	5 00
" " "	$\frac{3}{4}$ "	"	5 00

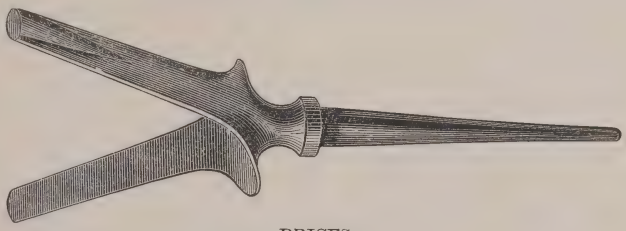
PLAIN CLIP KING BOLTS.



PRICES.

No. 1	Light,	Diameter at Collar	$\frac{1}{2}$	inch.....	per doz	$2 00
" 2	Medium	" "	$\frac{9}{16}$	"	"	2 00
" 3	Heavy	" "	$\frac{5}{8}$	"	"	2 50

FLANGED CLIP KING BOLTS.

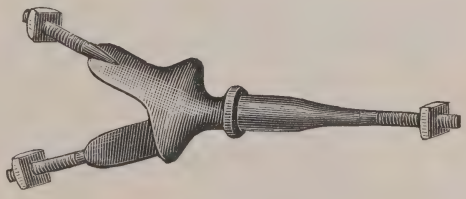


PRICES.

No. 1	Light,	Diameter at Collar	$\frac{1}{2}$	inch.....	per doz	$3 00
" 2	Medium,	" "	$\frac{9}{16}$	"	"	3 00
" 3	Heavy	" "	$\frac{5}{8}$	"	"	3 75
" 4	Extra Heavy	" "	$\frac{3}{4}$	"	"	4 75

FINISHED CLIP KING BOLT CLIPS.

Flanged Pattern.



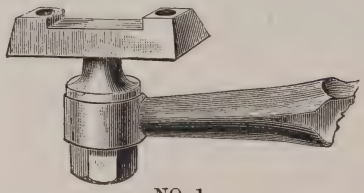
PRICES.

No. 1	Light,	$\frac{1}{2}$	inch.....	per doz	$3 50
" 2	Medium,	$\frac{9}{16}$	"	"	3 50
" 3	Heavy,	$\frac{5}{8}$	"	"	4 25

CLIP KING BOLT YOKES.

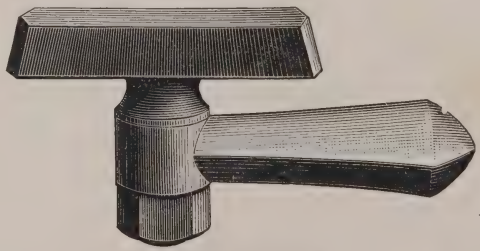
Price.....per doz $2 00

CLIP KING BOLT TIES.



NO. 1.

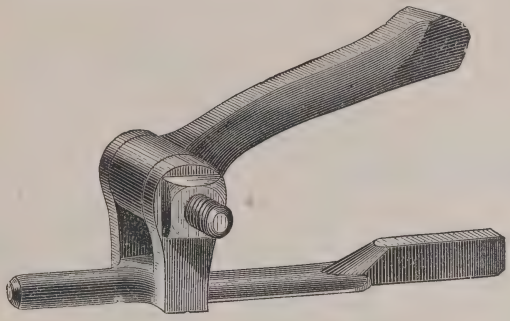
For ⅞, 1, 1⅛, 1¼, 1⅜ and 1½ inch Axle.....per doz $4 00
Brace Ends, separate..... " 1 00



NO. 3. ADJUSTABLE.

Buggy Size.....per doz $3 50
Extra Heavy 2½ inch long on top..... " 4 00

CARRIAGE SHAFT COUPLINGS.



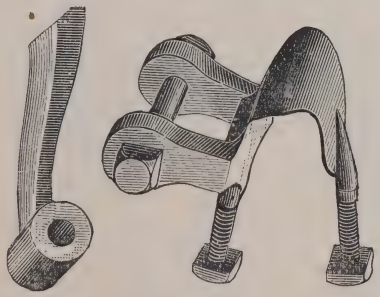
LIST PRICE.—*Per Dozen Pairs.*

	Black.	Bright.
⅞ inch Eye, extra light	$11 25	$13 25
1 " " light	11 25	13 25
1 " " heavy	11 75	13 75
1⅛ " "	12 50	14 50
1¼ " "	14 50	16 50
1½ " "	17 00	19 00

The bolt and the holes in the eyes are milled to exact sizes, thus insuring good fit and and a uniform wear on the eye.

Unless otherwise ordered, the above Sheckles are put up *with thread in one ear.*

FINISHED SHAFT COUPLINGS.



PRICE LIST.—*Per Dozen Pairs.*

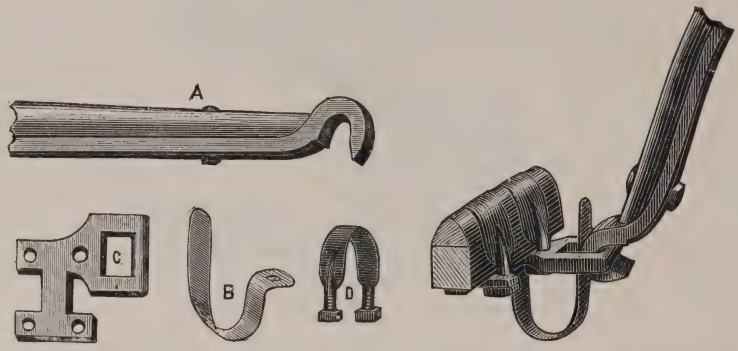
⅞ inch, extra light	$13 75
1 " light	13 75
1 " heavy	14 25
1⅛ "	15 00
1¼ "	17 00

Unless otherwise ordered, this style is furnished *without thread in ear.*

Above fitted with Pole Eyes same *List Price.*

NEWTON'S PATENT SHAFT COUPLING.

And Anti-Rattler.



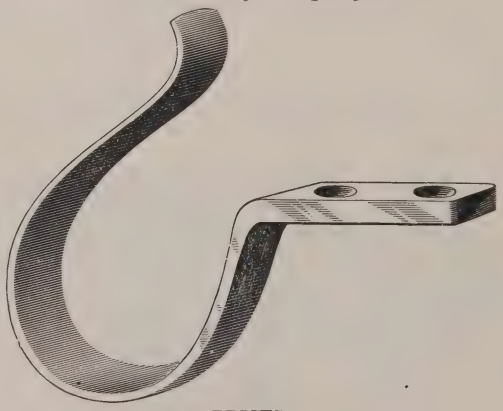
It is a safe and durable coupling, and a perfect Anti-Rattler. Can be changed for Pole or Shafts in one minute, and with great ease. Made in two sizes, Light for $\frac{3}{4}$ to 1 inch axles, and Heavy for $1\frac{1}{8}$ to $1\frac{3}{8}$ inch axles.

PRICES.

Shaft Couplings	per dozen sets	$11 25
Pole Attachments	" "	6 50

LADD'S ANTI-RATTLER.

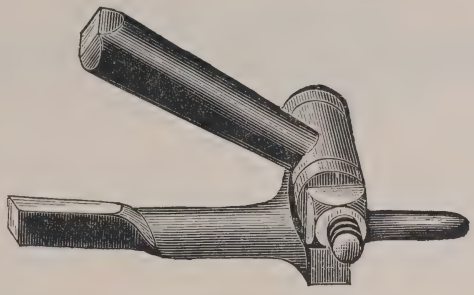
For Shaft Couplings.



PRICES.

For $\frac{3}{4}$, $\frac{7}{8}$ and 1 inch Axles	per dozen pairs	$6 00
" $1\frac{1}{8}$ and $1\frac{1}{4}$ " "	" "	7 00
" $1\frac{3}{8}$ " $1\frac{1}{2}$ " "	" "	8 00

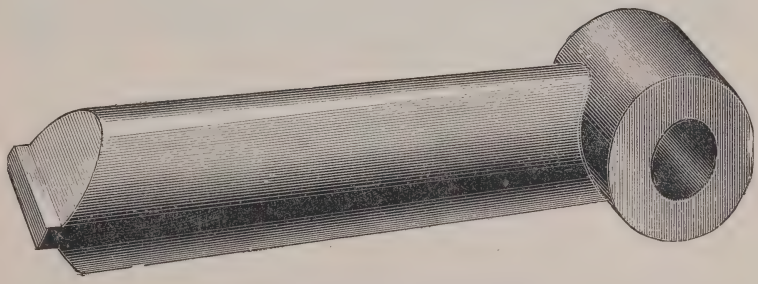
CARRIAGE POLE COUPLINGS.



LIST PRICE.—*Per Dozen Pairs.*

Size.		Black.	Bright.
⅞ inch Eye,	extra light	$11 25	$13 25
1 " "	light	11 25	13 25
1 " "	heavy	11 75	13 75
1⅛ " "	"	12 50	14 50
1¼ " "	"	14 50	16 50
1½ " "	"	17 00	19 00

REVERSED PATTERN POLE EYES.



LIST PRICE.—*Per Dozen Pairs.*

	Black.	Bright.
⅞ inch Eye	$5 00	$6 00
1 " "	6 50	7 50
1⅛ " "	6 50	7 50
1¼ " "	8 00	9 00
1½ " "	9 00	10 00

SUPERIOR AXLE CLIPS.

LIST PRICE.

Number.	Width of Flat Part.	Length of Flat Part.	Size of Shank.	Per Dozen.
0	$\frac{7}{16}$	$2\frac{3}{4}$	$\frac{5}{16}$	$0 70
1	$\frac{7}{8}$	$3\frac{1}{4}$	$\frac{5}{16}$	70
2	$\frac{7}{8}$	$3\frac{3}{4}$	$\frac{5}{16}$	75
3	$\frac{7}{8}$	$4\frac{1}{4}$	$\frac{5}{16}$	78
4	$\frac{15}{16}$	$4\frac{3}{4}$	$\frac{3}{8}$	97
5	1	$5\frac{1}{4}$	$\frac{3}{8}$	1 20
6	$1\frac{1}{8}$	6	$\frac{3}{8}$	1 50

Packed in Boxes of Four Dozen each.

HEAVY SUPERIOR AXLE CLIPS.

LIST PRICE.

Number.	Size of Shank.	Width of Flat Part.	Length of Flat Part.	Per Dozen.
0	$\frac{3}{8}$	$1\frac{1}{8}$	4	$1 12½
1	$\frac{3}{8}$	$1\frac{1}{8}$	$4\frac{1}{2}$	1 12½
2	$\frac{3}{8}$	$1\frac{1}{8}$	5	1 25
3	$\frac{3}{8}$	$1\frac{1}{8}$	$5\frac{1}{2}$	1 40
4	$\frac{3}{8}$	$1\frac{1}{8}$	6	1 70
5	$\frac{3}{8}$	$1\frac{1}{8}$	$6\frac{1}{2}$	2 00
6	$\frac{3}{8}$	$1\frac{1}{8}$	7	2 50

Clips have nicely beveled edges, and are ready for use.

Put up in Boxes of Four Dozen each.

SEWARD'S '76 AXLE CLIPS.

LIST PRICE.

Size of Shank. $\frac{5}{16}$ inch.

No.	0,	Flat	Part	$2\frac{3}{4}$	inches	long	and	$\frac{7}{8}$	wide.....	per doz	$0 80
"	1,	"	"	$3\frac{1}{4}$	"	"	"	$\frac{7}{8}$	"	"	80
"	2,	"	"	$3\frac{3}{4}$	"	"	"	$\frac{7}{8}$	"	"	80
"	3,	"	"	$4\frac{1}{4}$	"	"	"	$\frac{7}{8}$	"	"	85
"	4,	"	"	$4\frac{3}{4}$	"	"	"	$\frac{7}{8}$	"	"	1 00
"	5,	"	"	$5\frac{1}{4}$	"	"	"	$\frac{7}{8}$	"	"	1 15
"	6,	"	"	6	"	"	"	$\frac{7}{8}$	"	"	1 35

Put up in Boxes of Four Dozen each

SEWARD'S LIGHT AXLE CLIPS.

For Trotting Wagons.

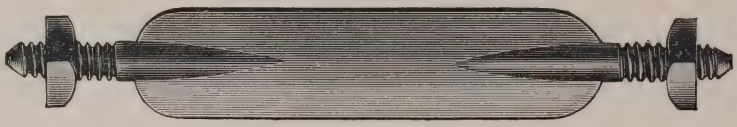
LIST PRICE.

Size of Shank, $\frac{1}{4}$ inch.

No.	00,	Flat	Part	$1\frac{1}{2}$	inches	long,		$\frac{5}{8}$	wide.....	per doz	$0 80
"	0,	"	"	2	"	"		$\frac{5}{8}$	"	"	80
"	1,	"	"	$2\frac{1}{2}$	"	"		$\frac{5}{8}$	"	"	80
"	2,	"	"	3	"	"		$\frac{5}{8}$	"	"	80
"	3,	"	"	$3\frac{1}{2}$	"	"		$\frac{5}{8}$	"	"	80
"	4,	"	"	4	"	"		$\frac{5}{8}$	"	"	92

Put up in Boxes of Four Dozen each.

NORWAY IRON AXLE CLIPS.



LIST PRICE.

Number.	Width of Flat Part.	Length of Flat Part.	Size of Shank.	Per Dozen.
0	$\frac{7}{8}$	$2\frac{3}{4}$	$\frac{5}{16}$	$0 80
1	$\frac{7}{8}$	$3\frac{1}{4}$	$\frac{5}{16}$	80
2	$\frac{7}{8}$	$3\frac{3}{4}$	$\frac{5}{16}$	85
3	$\frac{7}{8}$	$4\frac{1}{4}$	$\frac{5}{16}$	90
4	$\frac{15}{16}$	$4\frac{3}{4}$	$\frac{5}{16}$	1 00
5	1	$5\frac{1}{4}$	$\frac{5}{16}$	1 15
6	$1\frac{1}{8}$	6	$\frac{3}{8}$	1 35

HEAVY NORWAY IRON AXLE CLIPS.

For Heavy Carriages, Rockaways, etc

$\frac{3}{8}$ inch Shank.

No.				Per Doz.
0,	flat part 4	in.	$1\frac{1}{8}$ in. wide,	$1 00
1,	" $4\frac{1}{2}$		$1\frac{1}{8}$ "	1 00
2,	" 5		$1\frac{1}{8}$ "	1 15
3,	" $5\frac{1}{2}$		$1\frac{1}{8}$ "	1 25
4,	" 6		$1\frac{1}{8}$ "	1 40
5,	" $6\frac{1}{2}$		$1\frac{1}{8}$ "	1 75
6,	" 7		$1\frac{1}{8}$ "	2 00
7,	" $7\frac{1}{2}$		$1\frac{1}{8}$ "	2 25

Put up in boxes of 4 dozen each.

Express, Truck and Market Wagons

$\frac{7}{16}$ inch Shank.

No.				Per Doz.
0,	flat part 5	in.	$1\frac{5}{8}$ in. wide	$2 00
1,	" 6		$1\frac{5}{8}$ "	2 25
2,	" 7		$1\frac{3}{4}$ "	2 50
3,	" 8		$1\frac{3}{4}$ "	2 90
4,	" 9		$1\frac{3}{4}$ "	3 25
5,	" 10		$1\frac{3}{4}$ "	3 75

Put up in boxes of 2 dozen each.

These Axle Clips are drawn from the best Norway Iron, and in strength, finish and general appearance, are equal to the best Clip offered in the market.

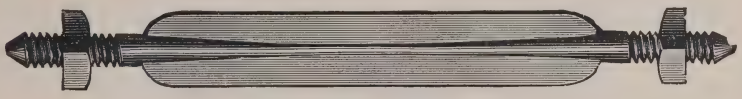
SEWARD'S '76 SPRING BAR CLIPS.

LIST PRICE.

Size of Shank, $\frac{5}{16}$ inch.

No. 0,	Center	$4\frac{1}{2}$	inches	long,	$\frac{5}{8}$	wide	per doz	$1 00
" 1,	"	$4\frac{3}{4}$	"	"	$\frac{5}{8}$	"	"	1 15
" 2,	"	$5\frac{1}{4}$	"	"	$\frac{5}{8}$	"	"	1 22
" 3,	"	$5\frac{3}{4}$	"	"	$\frac{5}{8}$	"	"	1 30
" 4,	"	$6\frac{3}{8}$	"	"	$\frac{5}{8}$	"	"	1 45
" 5,	"	7	"	"	$\frac{5}{8}$	"	"	1 65
" 6,	"	$7\frac{3}{4}$	"	"	$\frac{5}{8}$	"	"	1 85

NORWAY IRON SPRING BAR CLIPS.



LIST PRICE.—*Per Dozen.*

No. 0,	$\frac{5}{8}$	inch	wide.	Size of Shank,	$\frac{5}{16}$.	Center	4	inches	long	$1 00
" 1,	$\frac{5}{8}$	"	"	"	"	$\frac{5}{16}$	"	$4\frac{3}{4}$	"	"	1 15
" 2,	$\frac{5}{8}$	"	"	"	"	$\frac{5}{16}$	"	$5\frac{1}{4}$	"	"	1 22
" 3,	$\frac{5}{8}$	"	"	"	"	$\frac{5}{16}$	"	$5\frac{3}{4}$	"	"	1 30
" 4,	$\frac{5}{8}$	"	"	"	"	$\frac{5}{16}$	"	$6\frac{3}{8}$	"	"	1 45
" 5,	$\frac{5}{8}$	"	"	"	"	$\frac{5}{16}$	"	7	"	"	1 65

BREWSTER SIDE BAR CLIPS.

Norway Iron.

LIST PRICE.

No. 1,	Flat Part	3	inch	long.	$\frac{7}{8}$	wide	per doz	$0 90
" 2,	"	"	$3\frac{7}{8}$	"	"	$\frac{7}{8}$	"	1 00
" 3,	"	"	$4\frac{3}{8}$	"	"	$\frac{7}{8}$	"	1 15

Put up in Boxes of Four Dozen each.

SEWARD'S SHARP CENTER RIBBED CLIP.

Cut A.—For Spring Bars.

LIST PRICE.

Size of Shank, $\frac{5}{16}$ inch.

No. 0,	Flat Part,	$4\frac{1}{2}$	inches long,	$\frac{5}{8}$	wide	per doz		$1 05
" 1,	"	$4\frac{3}{4}$	"	$\frac{5}{8}$	"	"		1 20
" 2,	"	$5\frac{1}{4}$	"	$\frac{5}{8}$	"	"		1 27
" 3,	"	$5\frac{3}{4}$	"	$\frac{5}{8}$	"	"		1 35
" 4,	"	$6\frac{3}{8}$	"	$\frac{5}{8}$	"	"		1 50
" 5,	"	7	"	$\frac{5}{8}$	"	"		1 70

Put up in Boxes of Four Dozen each.

SEWARD'S SHARP CENTER CLIPS.

Cut B.—For Axle or Spring Bars.

LIST PRICE.

No. 0,	Flat Part,	$4\frac{1}{4}$	inches long,	$\frac{9}{16}$	wide	per doz		$1 20
" 1,	"	$4\frac{3}{4}$	"	$\frac{9}{16}$	"	"		1 30
" 2,	"	$5\frac{3}{8}$	"	$\frac{9}{16}$	"	"		1 45
" 3,	"	$6\frac{1}{8}$	"	$\frac{9}{16}$	"	"		1 60
" 4,	"	$6\frac{7}{8}$	"	$\frac{9}{16}$	"	"		1 80

Put up in Boxes of Four Dozen each.

SEWARD'S SHARP CENTER AXLE CLIPS.

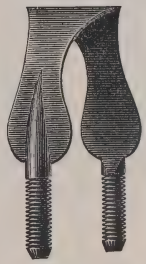
CUT C.—LIST PRICE.

Size of Shank, $\frac{5}{16}$ inch.

No. 0,	Flat Part	$2\frac{3}{4}$	inches long and	$\frac{7}{8}$	wide	per doz		$0 85
" 1,	"	$3\frac{1}{4}$	"	$\frac{7}{8}$	"	"		85
" 2,	"	$3\frac{3}{4}$	"	$\frac{7}{8}$	"	"		85
" 3,	"	$4\frac{1}{4}$	"	$\frac{7}{8}$	"	"		90
" 4,	"	$4\frac{3}{4}$	"	$\frac{7}{8}$	"	"		1 05
" 5,	"	$5\frac{1}{4}$	"	$\frac{7}{8}$	"	"		1 20

Put up in Boxes of Four Dozen each.

SEWARD'S O. C. SHARP CENTER AXLE CLIPS.



LIST PRICE.

Size of Shank, $\frac{5}{16}$ inch.

No. 00,	Flat Part	$2\frac{1}{4}$	inches long and	1	inch wide	per doz		$1 00
" 0,	"	$2\frac{3}{4}$	"	1	"	"		1 00
" 1,	"	$3\frac{1}{4}$	"	1	"	"		1 00
" 2,	"	$3\frac{3}{4}$	"	1	"	"		1 05
" 3,	"	$4\frac{1}{4}$	"	1	"	"		1 10
" 4,	"	$4\frac{3}{4}$	"	1	"	"		1 20
" 5,	"	$5\frac{1}{4}$	"	1	"	"		1 30

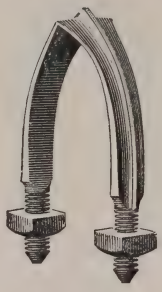
SEWARD'S 1-4 INCH O. C. CLIPS.

For Perch Plates and Sleighs.

No. 00,	Flat Part	$1\frac{1}{2}$	inches long and	$\frac{3}{4}$	wide	per doz		$1 00
" 0,	"	2	"	$\frac{3}{4}$	"	"		1 00
" 1,	"	$2\frac{1}{2}$	"	$\frac{3}{4}$	"	"		1 00
" 2.	"	3	"	$\frac{3}{4}$	"	"		1 00

Put up in Boxes of Four Dozen each.

SEWARD'S SHARP SPRING BAR CLIPS.



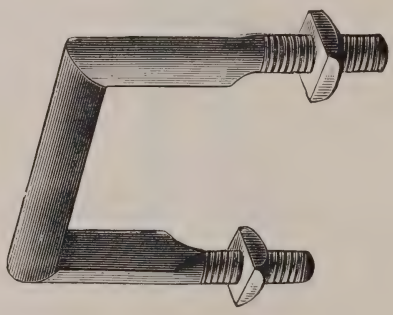
LIST PRICE.

Size of Shank, $\frac{5}{16}$ inch.

No. 1,	Flat Part	$4\frac{3}{4}$	inches long and	$\frac{7}{8}$	wide.....	per doz		$1 40
" 2,	"	$5\frac{3}{8}$	"	$\frac{7}{8}$	"	"		1 55
" 3,	"	$6\frac{1}{8}$	"	$\frac{7}{8}$	"	"		1 70

Put up in Boxes of Four Dozen each.

SHORT SPRING CLIPS.

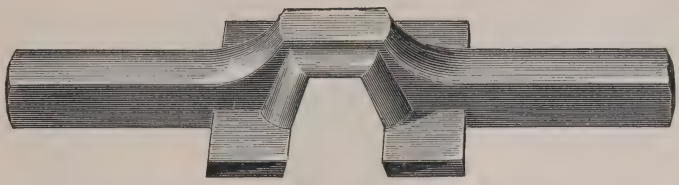


LIST PRICE.

No. 1,	For 3	leaf,	$1\frac{1}{4}$	inch	spring,	flat part	$\frac{3}{4}$	inch,	$\frac{5}{16}$	Shank..	$1 75
" 2,	" 4	"	$1\frac{1}{4}$	"	"	1	"	$\frac{5}{16}$	"	..	1 75
" 4,	" 3	"	$1\frac{1}{2}$	"	"	$\frac{3}{4}$	"	$\frac{3}{8}$	"	..	2 00
" 5,	" 4	"	$1\frac{1}{2}$	"	"	$\frac{7}{8}$	"	$\frac{3}{8}$	"	..	2 00
" 6,	" 5	"	$1\frac{1}{2}$	"	"	$1\frac{1}{4}$	"	$\frac{3}{8}$	"	..	2 00

Put up in Boxes of Four Dozen each.

FRENCH COACH CLIPS.



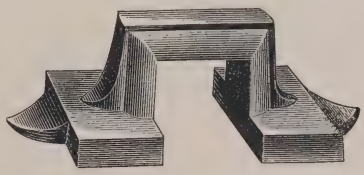
Forged from one Solid Piece Best Norway Iron.

PRICES.

No. 1,	For 2	inch	Springs			per pair	$5 00
" 2,	" 1⅞	"	"			"	4 00
" 3,	" 1½	"	"			"	3 25
" 4,	" 1¼	"	"			"	2 75

COACH AXLE CLIPS.

To Match Above.

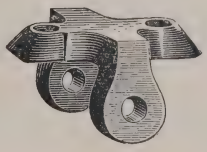


A Set Consists of Four Clips.

No. 1,	For 1⅛	inch	Axle,	1¾ or 2	inch	Spring	per set	$5 00
" 2,	" 1⅛	"		1½ or 1¾	"		"	4 00
" 3,	" 1¼	"		1¼ or 1½	"		"	3 50
" 4,	" 1⅛	"		1¼ or 1½	"		"	3 00
" 5,	" 1	"		1 or 1¼	"		"	2 75

SIDE BAR SPRING SHACKLES.

Norway Iron.



For 1¼	inch	Spring,	1 inch	Bar	per dozen pairs	$3 00
" 1¼	"		1⅛	"	" "	3 00
" 1¼	"		1¼	"	" "	3 00

SMITH'S AXLE SADDLE CLIPS.

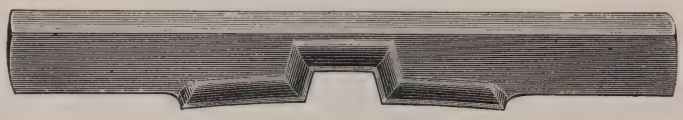
Norway Iron.

LIST PRICE.

⅞	inch Axle,	1¼	Spring,	Flat Part	2	inches long	.....	per doz	$12 00
1	"	1¼	"	"	2	"	.....	"	12 00
1⅛	"	1¼	"	"	2	"	.....	"	12 00
1⅛	"	1½	"	"	2	"	.....	"	14 00
1¼	"	1½	"	"	2	"	.....	"	14 00

AMERICAN COACH CLIP.

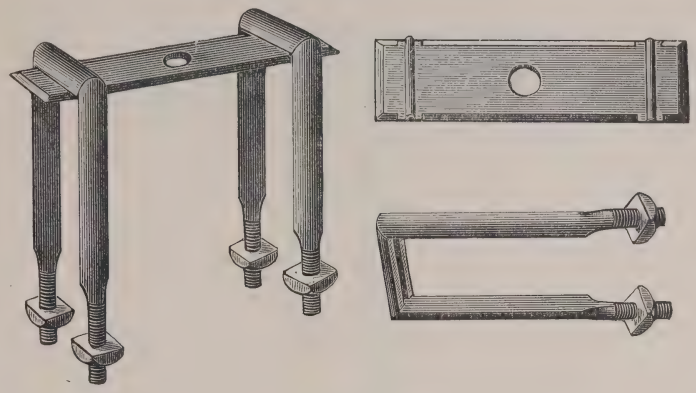
Forged Solid from one piece Norway Iron.



LIST PRICE.

No. 2½,	For 1⅝	inch Spring	.....	per pair	$4 00
" 3	" 1½	"	.....	"	3 25
" 4	" 1¼	"	.....	"	2 75

BUGGY SADDLE CLIPS.



Half Round Pattern.

PRICE LIST.

For Springs $1\frac{1}{4}$ *inches wide.*

No.	00	Flat Part of Clips	2	in. long with top plates, per doz sets					$5 00
"	0	"	"	$2\frac{1}{4}$	"	"	"	"	"	5 00
"	$0\frac{1}{2}$	"	"	$2\frac{1}{2}$	"	"	"	"	"	5 00
"	2	"	"	3	"	"	"	"	"	5 00
"	3	"	"	$3\frac{1}{4}$	"	"	"	"	"	5 00
"	4	"	"	$3\frac{1}{2}$	"	"	"	"	"	5 00

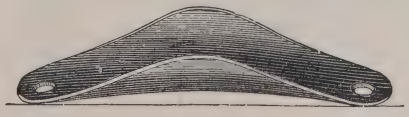
For Springs $1\frac{3}{8}$ *inches wide.*

No.	5	Flat Part of Clips	$2\frac{1}{4}$	in. long with top plates, per doz sets					$5 00
"	$5\frac{1}{2}$	"	"	$2\frac{1}{2}$	"	"	"	"	"	5 00
"	6	"	"	$3\frac{1}{4}$	"	"	"	"	"	5 00
"	$6\frac{1}{2}$	"	"	$3\frac{1}{2}$	"	"	"	"	"	5 00

For Springs $1\frac{1}{2}$ *inches wide.*

No.	7	Flat Part of Clips	$2\frac{3}{4}$	in. long with top plates, per doz sets					$5 00
"	8	"	"	$2\frac{3}{4}$	"	"	"	"	"	5 00
"	9	"	"	$3\frac{1}{2}$	"	"	"	"	"	5 00
"	10	"	"	$3\frac{3}{4}$	"	"	"	"	"	5 00

WROUGHT IRON FELLOE PLATES.



In Boxes containing 10 lbs each.

For Felloes $\frac{3}{4}$ to 2 inches on tread.....per lb 10 cents

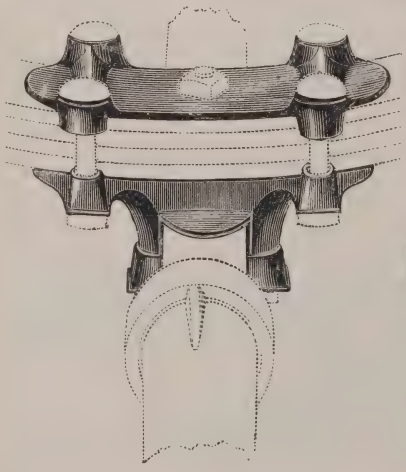
DOUBLE PERCH SADDLE CLIPS.

PRICE LIST.

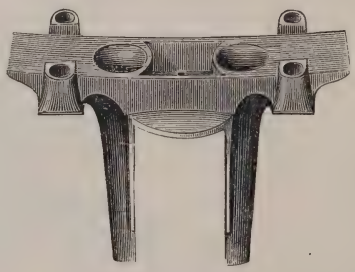
No.	00	1¼	Spring, Flat	Part	2	inches long	per doz	$2	25
"	0	1¼	"	"	2¼	"	"	2	25
"	1	1¼	"	"	2½	"	"	2	25
"	2	1¼	"	"	2¾	"	"	2	25
"	3	1⅜	"	"	2½	"	"	2	25
"	4	1⅜	"	"	3	"	"	2	25
"	5	1½	"	"	3	"	"	2	25
"	6	1½	"	"	3½	"	"	2	25

MILLER'S PATENT SPRING CLIPS.

For Platform or Elliptic Springs.



For Platform.

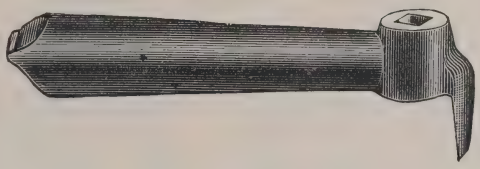


For Elliptic.

Put up in sets complete, ready for use. Each set consists of Spring-Plate, Bed-Piece and Axle Yoke, fitted with six Norway Iron Bolts.

Price..... per dozen sets $6 50

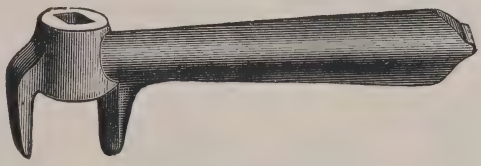
LIPPED BODY LOOP.



PRICES.

No. 1	For $\frac{1}{4}$	inch Bolt	per doz	$1 50
" 2	" $\frac{5}{16}$	"	"	1 50
" 3	" $\frac{3}{8}$	"	"	1 50

DOUBLE LIPPED BODY LOOP.



PRICES.

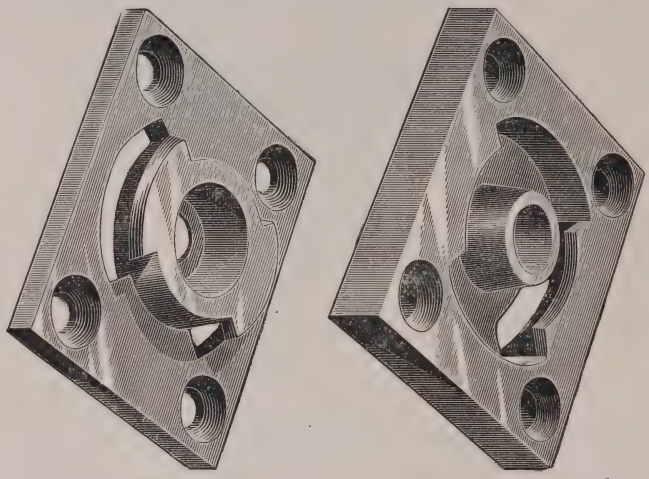
No. 1	For $\frac{1}{4}$	inch Bolt	per doz	$2 00
" 2	" $\frac{5}{16}$	"	"	2 00

FLANGED BODY LOOP.

PRICES.

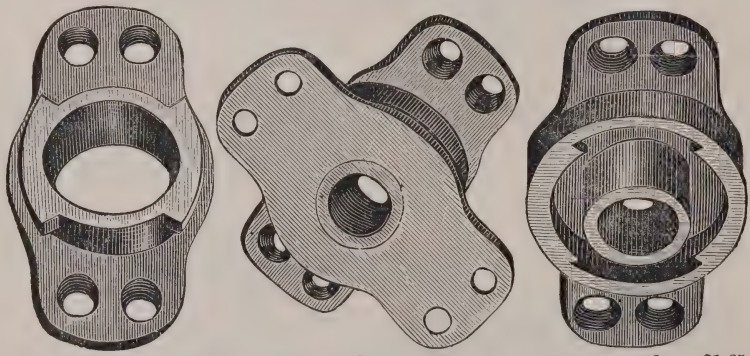
No. 1	For $\frac{1}{4}$	inch Bolt	per doz	$2 50
" 2	" $\frac{5}{16}$	"	"	2 50

DOUBLE LOCK WHIFFLETREE PLATES.



No. 1 For Light Buggies, 1⅝ inches wide, $\frac{5}{16}$ inch Bolt.....per doz $1 80
" 2 " Heavier Work, 1⅝ " ⅜ " .... " 1 80
Packed Three Dozen in a Box.

P. AND C. WHIFFLETREE PLATES.



No. 1 For Light Buggies, 1½ inch wide..... .....per doz $1 25
" 2 " Heavy Work, 1¾ " .... " 1 50

PATENT SOLID COLLARS.

Size	¼ inch	$\frac{5}{16}$	⅜	$\frac{7}{16}$	½	⅝	¾	⅞	1
Per Doz	80 cents	80	95	$1 15	$1 40	$1 85	$2 50	$3 50	$5 50

DOUBLE PERCH ENDS.

No. 1 $\frac{3}{4}$ inch for Double Reach Two Seat Wagons, per doz pairs $4 50
" 2 $\frac{7}{8}$ " " " " Four " " " 6 75

DOUBLE PERCH ENDS.

For Bent or Drop Perch.

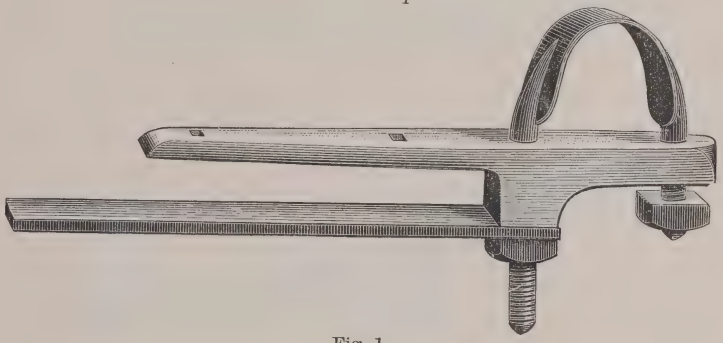


Fig. 1.

Fig. 2.

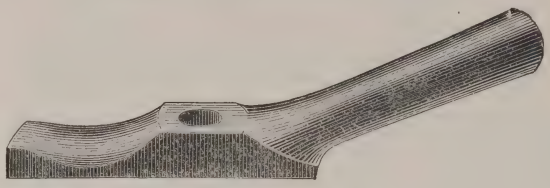
No. 3 $\frac{3}{4}$ inch for Brewster Bent Reach.....per doz pairs $3 75
Fig. 1 Shows the manner in which it is used.
Fig. 2 Shows the Perch end as furnished to the trade.

MOSIER'S PATENT REACH SOCKETS.

For Brewster Wagons.

For $\frac{3}{4}$ inch Reach.....per doz pairs $6 00
" $\frac{7}{8}$ " ..... " 9 00

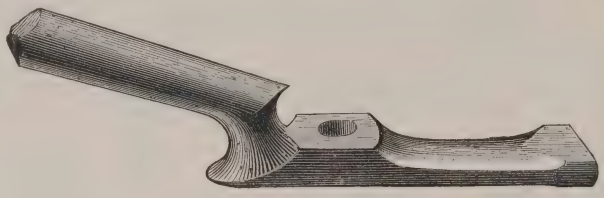
NORWAY IRON STAY ENDS.



Pattern No. 4.

For $\frac{8}{8}$ inch Stay	per doz	$1 10
" $\frac{7}{16}$ "	"	1 40
" $\frac{1}{2}$ "	"	1 75
" $\frac{9}{16}$ "	"	2 10

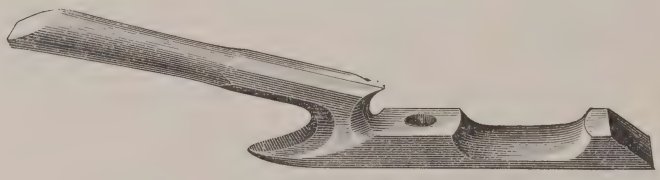
Packed Two Dozen in a Box.



Pattern No. 3.

For $\frac{8}{8}$ inch Stay	per doz	$2 00
" $\frac{7}{16}$ "	"	2 40
" $\frac{1}{2}$ "	"	2 65
" $\frac{9}{16}$ "	"	2 90

Packed Two Dozen in a Box.

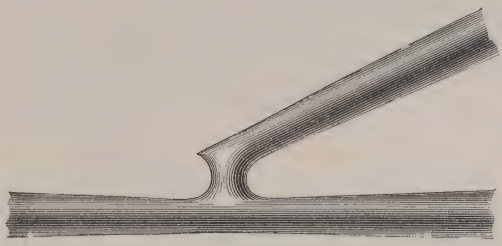


Point Octagon Pattern.

No. 0	Round Part $\frac{7}{16}$ inch		per doz	$2 40
" 1	" $\frac{1}{2}$ "		"	2 85
" 2	" $\frac{9}{16}$ "		"	3 15

Packed Two Dozen in a Box.

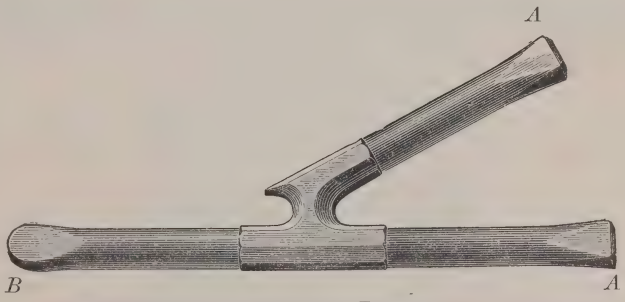
NORWAY IRON OFFSETS.



Pattern No. 2.

For $\frac{8}{8}$	inch Stay	per doz	$1 90
" $\frac{7}{16}$	"	"	2 25
" $\frac{1}{2}$	"	"	2 50
" $\frac{9}{16}$	"	"	2 75

Packed Two Dozen in a Box.

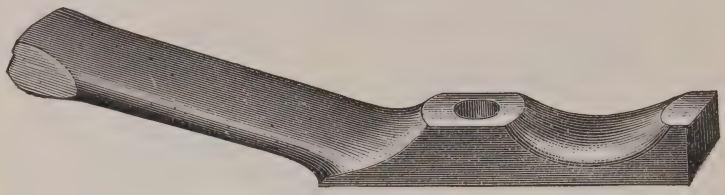


Point Octagon Pattern.

No. 0	Arm B, $\frac{7}{16}$	Arms AA, $\frac{8}{8}$	inch	per doz	$2 00
" 1	" B, $\frac{1}{2}$	" AA, $\frac{7}{16}$	"	"	2 35
" 2	" B, $\frac{9}{16}$	" AA, $\frac{1}{2}$	"	"	2 65

Packed Two Dozen in a Box.

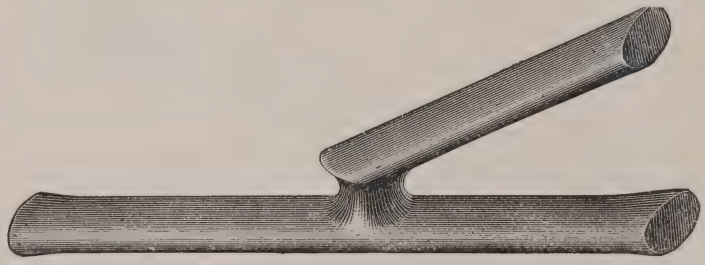
NORWAY IRON OVAL STAY ENDS.



No. 6.

For $\frac{9}{16}$ x $\frac{3}{8}$ Stay...per doz	$1 25	For $\frac{7}{8}$ x $\frac{1}{2}$ Stay....per doz	$2 10
" $\frac{5}{8}$ x $\frac{3}{8}$ " ... "	1 40	" 1 x $\frac{1}{2}$ " .... "	2 40
" $\frac{3}{4}$ x $\frac{7}{16}$ " ... "	1 75		

NORWAY IRON OVAL OFFSETS.



No. 7.

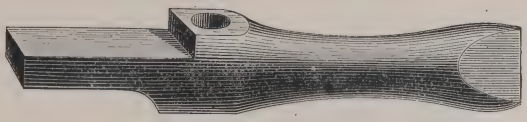
For $\frac{9}{16}$ x $\frac{3}{8}$ Stay...per doz	$2 00	For $\frac{7}{8}$ x $\frac{1}{2}$ Stay....per doz	$3 00
" $\frac{5}{8}$ x $\frac{3}{8}$ " ... "	2 30	" 1 x $\frac{1}{2}$ " .... "	3 30
" $\frac{3}{4}$ x $\frac{7}{16}$ " ... "	2 65		

NORWAY OVAL STAY END TIES.

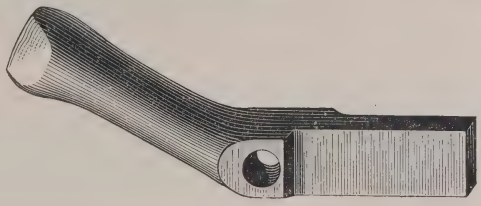
For $\frac{9}{16}$ x $\frac{3}{8}$ Stay...per doz	$1 00	For $\frac{7}{8}$ x $\frac{1}{2}$ Stay....per doz	$2 00
" $\frac{5}{8}$ x $\frac{3}{8}$ " ... "	1 20	" 1 x $\frac{1}{2}$ " .... "	2 35
" $\frac{3}{4}$ x $\frac{7}{16}$ " ... "	1 65		

Straight or Bent, same price.

NORWAY IRON STAY END TIES.



Straight Pattern.



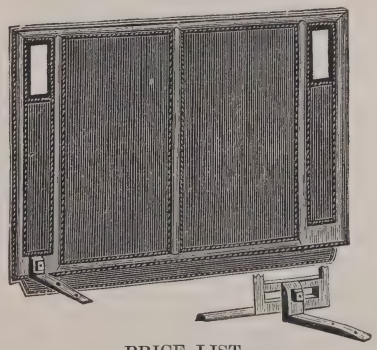
Bent Pattern.

For $\frac{3}{8}$	inch	Stay	Iron,	Straight or Bent		per poz	$1 00
" $\frac{7}{16}$	"	"	"	"	.....	"	1 20
" $\frac{1}{2}$	"	"	"	"	.....	"	1 45
" $\frac{9}{16}$	"	"	"	"	.....	"	1 60

Two Dozen in a Box.

ADJUSTABLE LEATHER DASH.

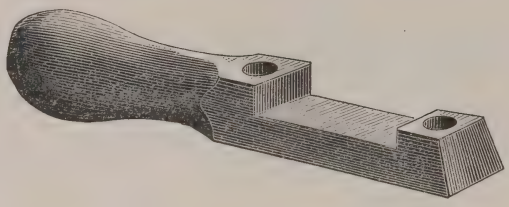
Complete with Feet and Bolts.



PRICE LIST.

22 x 11	each	$2 67	34 x 11	each	$3 00	28 x 15	each	$3 00
24 x 11	"	2 67	36 x 11	"	3 17	30 x 15	"	3 33
25 x 11	"	2 67	38 x 11	"	3 33	32 x 15	"	3 50
26 x 11	"	2 67	40 x 11	"	3 50	33 x 15	"	3 50
27 x 11	"	2 67	22 x 15	"	3 00	34 x 15	"	3 50
28 x 11	"	2 67	24 x 15	"	3 00	36 x 15	"	3 67
30 x 11	"	2 83	25 x 15	"	3 00	38 x 15	"	3 83
32 x 11	"	3 00	26 x 15	"	3 00	40 x 15	"	4 00
33 x 11	"	3 00	27 x 15	"	3 00	42 x 15	"	4 17

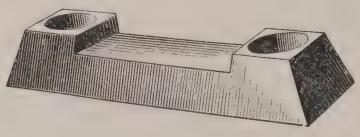
FORGED AXLE CLIP TIES.



No. 1.—Stay End,

For ⅞, 1, 1⅛ and 1¼ inch Axles.....per doz $1 00

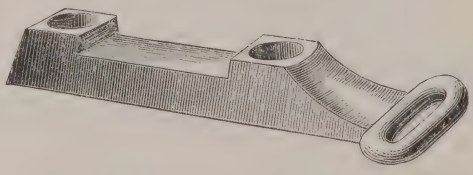
FORGED AXLE CLIP TIES.



No. 2.—New Pattern.

For ⅞, 1, 1⅛ and 1¼ inch Axles.....per doz 60 cents

FORGED AXLE CLIP TIES.



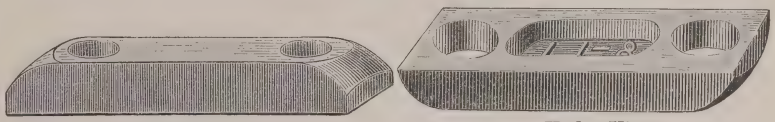
No. 4.—Loop Pattern.

For ⅞, 1, 1⅛ and 1¼ inch Axles.....per doz $1 25

WROUGHT IRON AXLE CLIP TIE.

In 10 lb. Boxes, all sizes.....per lb 10 cents

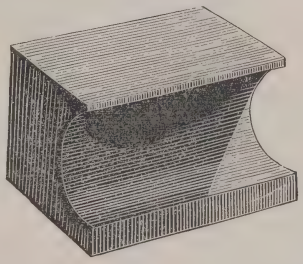
EAGLE CLIP YOKES.



Upper View. Under View.

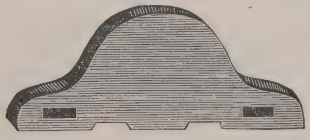
In 10 lb. Boxes, all sizes.....per lb 10 cents

SHAFT RUBBERS.



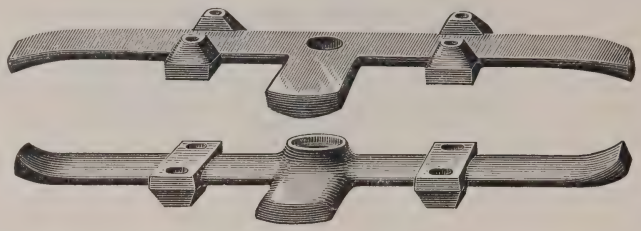
$\frac{7}{8}$ inch	per dozen pairs	50	cents
1 "	"	50	"
$1\frac{1}{8}$ "	"	55	"
$1\frac{1}{4}$ "	"	65	"

RUBBER SPRING BUFFERS.



No. 1	9	inches long,	2	inches thick	per lb	40	cents
" 2	$8\frac{3}{4}$	"	$1\frac{3}{4}$	"	"	40	"
" 3	$8\frac{1}{4}$	"	$1\frac{1}{2}$	"	"	40	"
" 4	6	"	$1\frac{3}{8}$	"	"	40	"

PERCH AND BED PLATES.

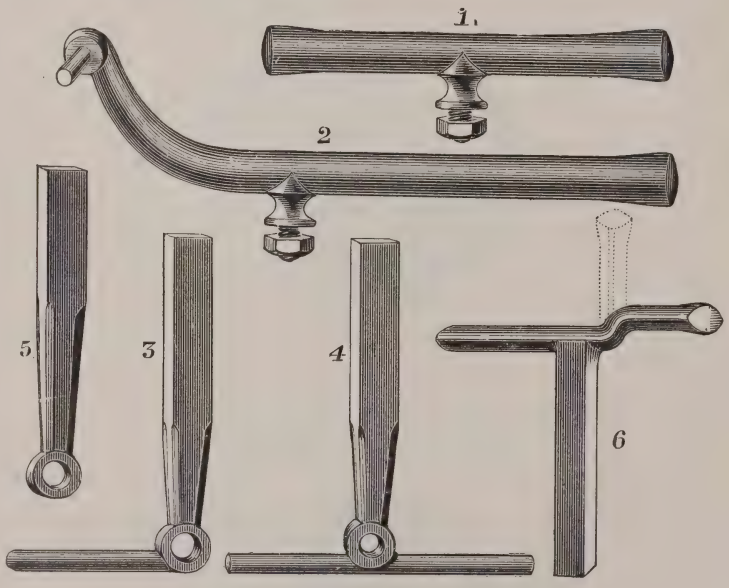


Four inch Space between Holes.

PRICES.

No. 1	For $1\frac{1}{4}$	inch	Spring	and	No. 1	King	Bolt.....	per doz	$5 70
" 2	" $1\frac{1}{4}$	"	"		2	"	.....	"	5 70
" 3	" $1\frac{3}{8}$	"	"		2	"	.....	"	5 70
" 4	" $1\frac{1}{2}$	"	"		3	"	.....	"	5 70

SEWARD'S IMPROVED SHIFTING RAIL.



PRICES.

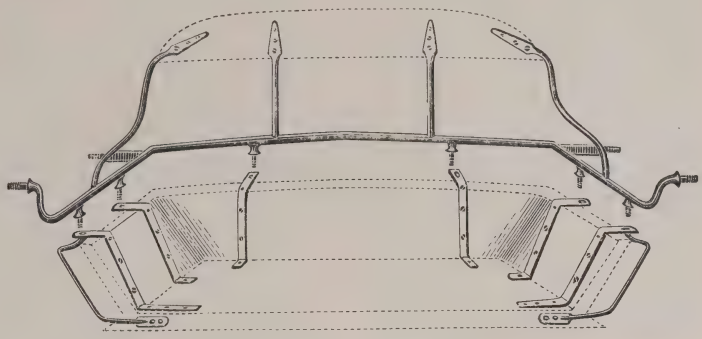
Single Rail.....	per set	$2 75
Double Rails.....	"	3 00

Two pieces each Nos. 1, 2, 3, 5 and 6 for a Single Set of Rails.

Two pieces each Nos. 1, 2 and 6, and four pieces No. 4 for Double Rails.

FORCED SHIFTING RAILS.

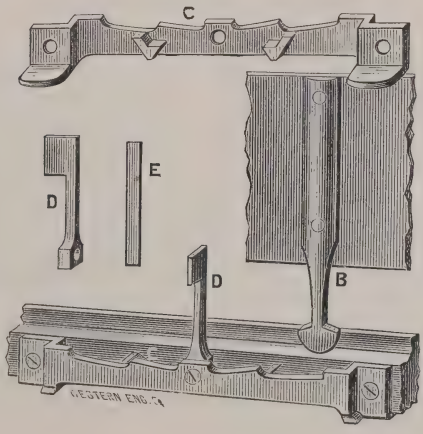
Welded Whole Length or in Halves.



Made entirely of Norway Iron.

No. 1½ $\frac{9}{16}$ Oval Iron, complete with Feet and Handles..... $3 50

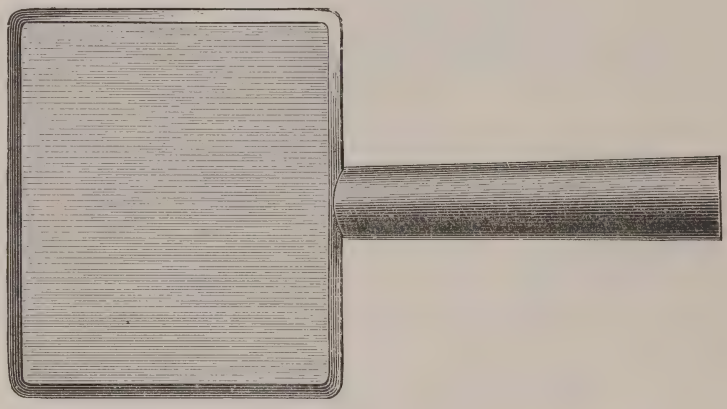
DOLSON'S PATENT SEAT FASTENER.



Price.....per dozen sets $2 50

We can recommend this Fastener as being the best of the many in the market.

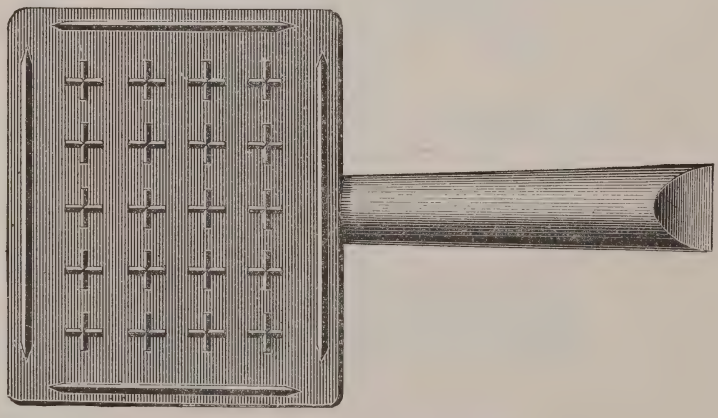
PLAIN PATTERN STEP PAD.



Forged from One Solid Piece.

No. 1	3 by 3½ inches	per dozen pairs		$3 75
" 2	3½ by 4 "	"		4 00
" 3	4 by 4¾ "	"		5 75

CROSS PATTERN STEP PADS.

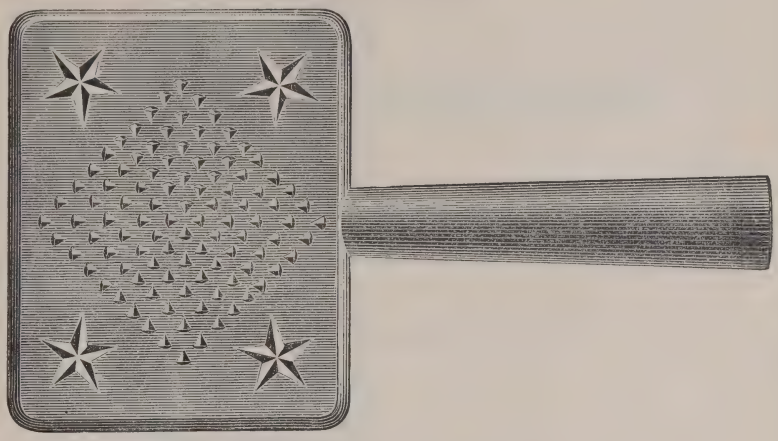


Forged from One Solid Piece.

No. 4	3 by 3½ inches	per dozen pairs		$5 50
" 5	3½ by 4 "	"		6 00

PATENT EMBOSSED STEP PADS.

Rasp and Star Pattern.

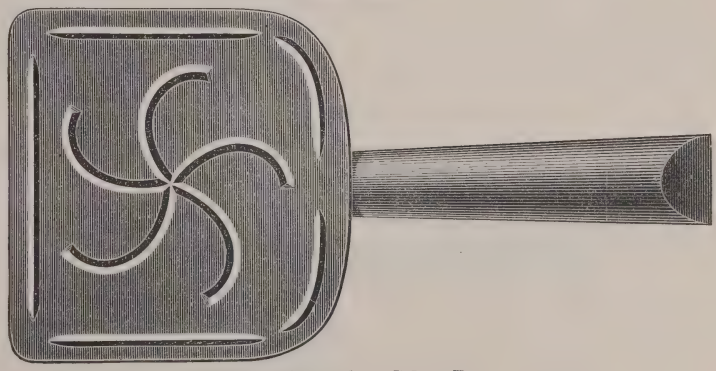


Forged from One Solid Piece.

No. 6	3⅛ by 3⅞ inches	per dozen pairs	$6 50
" 7	3¾ by 4⅜ "	"	8 00

PATENT EMBOSSED STEP PADS.

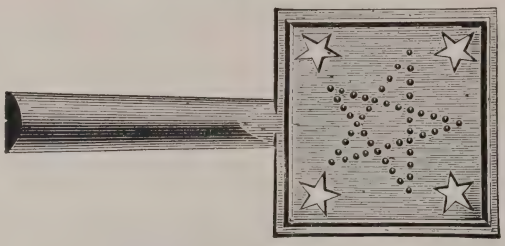
Scroll Pattern.



Forged from One Solid Piece.

No. 8	2⅜ by 2¾ inches	per dozen pairs	$6 00
" 9	3½ by 3¼ "	"	6 50
" 10	3⅝ by 3⅝ "	"	8 00

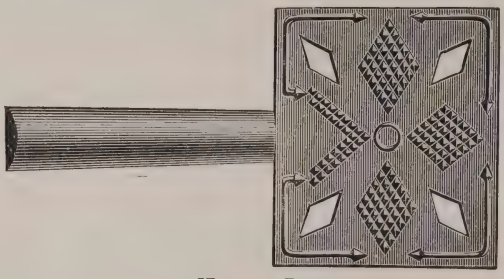
OPEN STAR STEP PAD.



Forged from One Solid Piece.

No.	11	3 by 3½	inches	per dozen pairs		$5 50
"	12	3½ by 4	"	"		6 00
"	13	4 by 4½	"	"		7 50

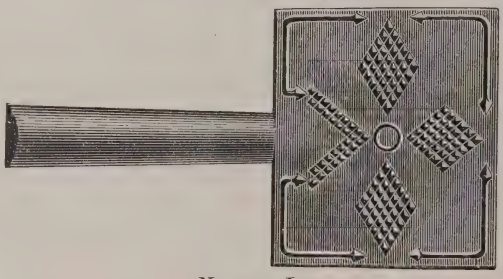
OPEN DIAMOND STEP PADS.



Norway Iron.

No.	14	3 by 3½	inches	per dozen pairs		$8 00
"	15	3½ by 4	"	"		9 00
"	16	4 by 4½	"	"		10 25

PLAIN DIAMOND STEP PADS.

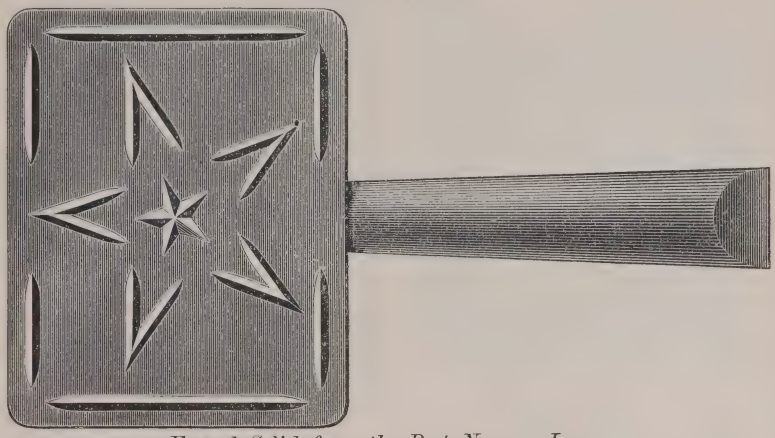


Norway Iron.

No.	17	3 by 3½	inches	per dozen pairs		$8 00
"	18	3½ by 4	"	"		9 00
"	19	4 by 4½	"	"		10 25

PATENT EMBOSSED STEP PADS.

Double Star Pattern.

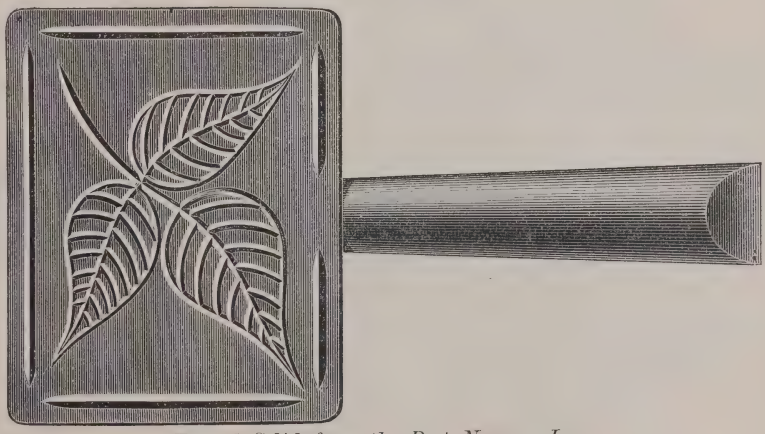


Forged Solid from the Best Norway Iron.

No. 20	$2\frac{5}{8}$ by $3\frac{1}{4}$ inches	per dozen pairs	$8 00
" 21	$3\frac{1}{8}$ by $3\frac{7}{8}$ "	"	9 00
" 22	$3\frac{3}{4}$ by $4\frac{3}{4}$ "	"	10 50

PATENT EMBOSSED STEP PADS.

Three Leaf Pattern.

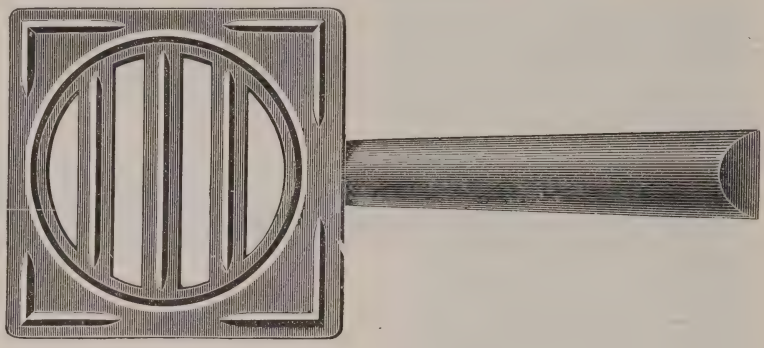


Forged Solid from the Best Norway Iron.

No. 23	$2\frac{5}{8}$ by $3\frac{1}{4}$ inches	per dozen pairs	$8 00
" 24	$3\frac{1}{8}$ by $3\frac{7}{8}$ "	"	9 00
" 25	$3\frac{3}{4}$ by $4\frac{3}{4}$ "	"	10 50

PATENT CROSS BAR STEP PAD.

Seventy-Seven Pattern.

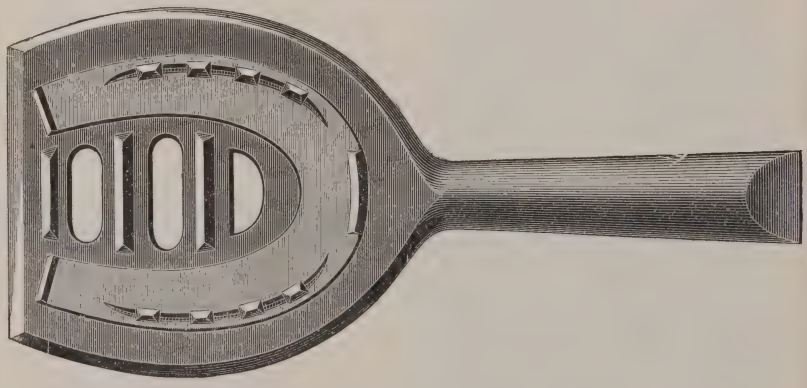


Made Expressly for Fine Light Carriages.

No. 26	2⅞ by 3	inches	per dozen pairs		$10 50
" 27	3¼ by 3⅜	"	"		11 25
" 28	3⅝ by 3¾	"	"		13 00

PATENT CROSS BAR STEP PADS.

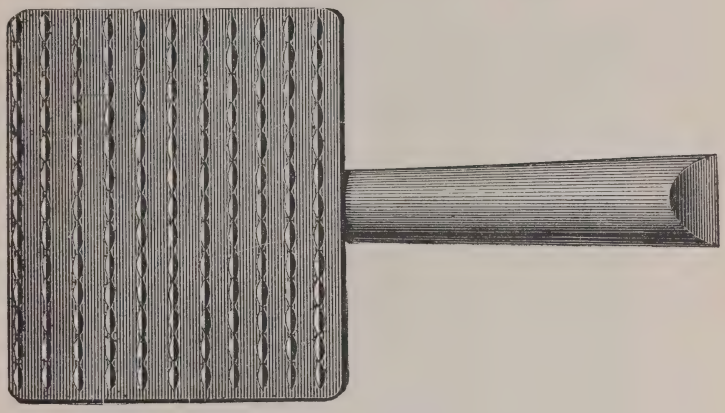
Horse Shoe Pattern.



Made Expressly for Fine Light Carriages.

No. 29	3 by 3½	inches	per dozen pairs		$10 50
" 30	3¾ by 3⅞	"	"		11 25
" 31	3¾ by 4¼	"	"		13 00

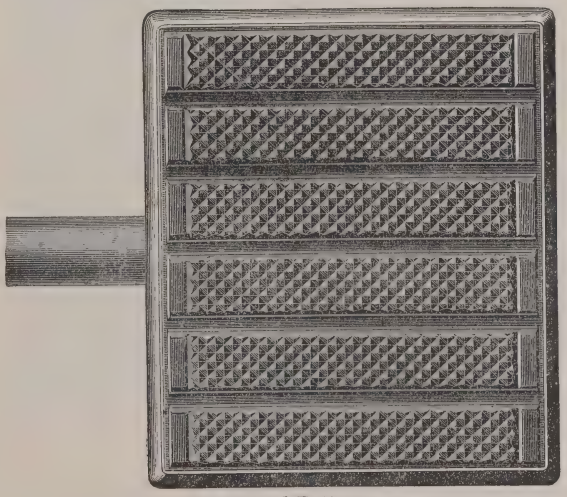
BEAD PATTERN STEP PADS.



Forged from One Solid Piece.

No. 32	3 by 3½ inches	per dozen pairs	$5 50
" 33	3½ by 4 "	"	6 00

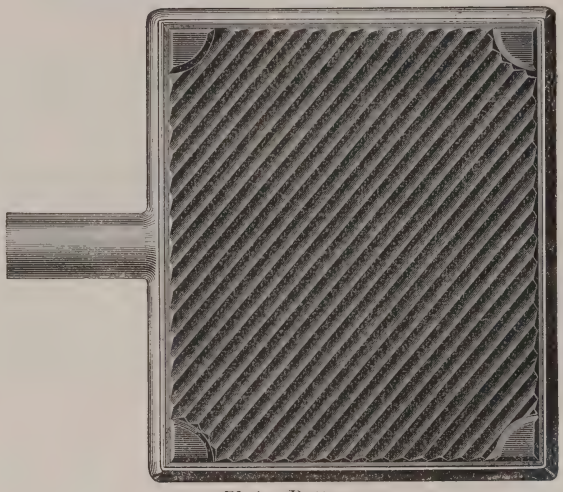
RUBBER COVERED STEP PADS.



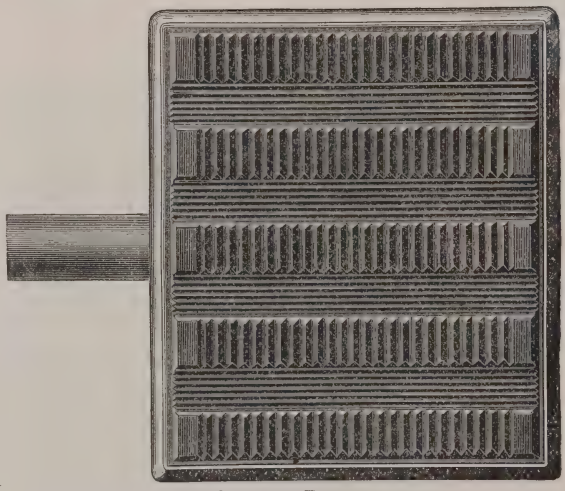
Diamond Pattern.

No. 34	3 by 3½ inches	per dozen pairs	$14 00
" 35	3½ by 4 "	"	14 00

RUBBER COVERED STEP PADS.



Plain Pattern.

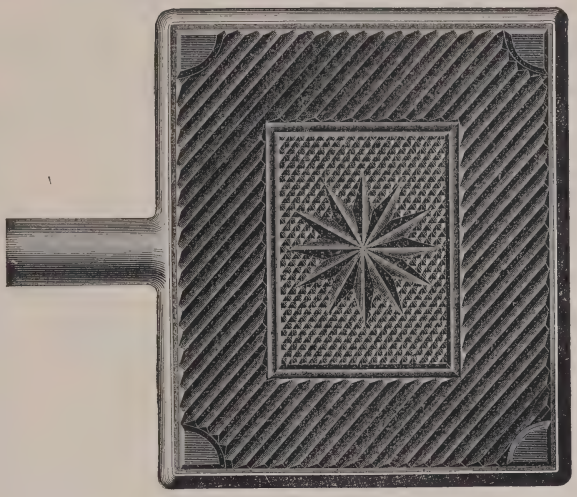


Channel Pattern.

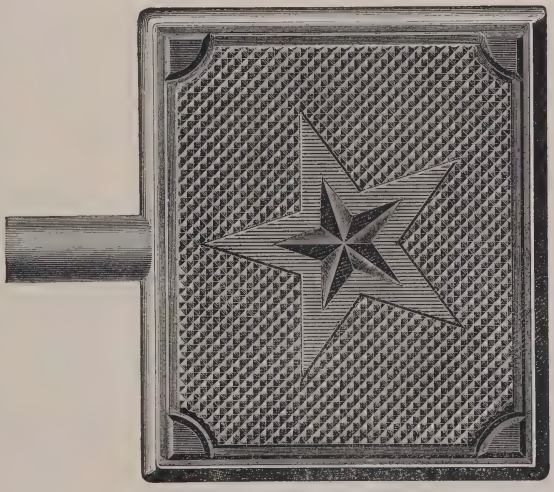
PRICES.

No. 36	Channel Pattern,	3	by $3\frac{1}{2}$	inches	.....per dozen pairs		$14 00
" 37	" "	$3\frac{1}{2}$	by 4	"	.....	"	14 00
" 38	Plain "	3	by $3\frac{1}{2}$	"	.....	"	12 00
" 39	" "	$3\frac{1}{2}$	by 4	"	.....	"	12 00

RUBBER COVERED STEP PADS.



Star Pattern.



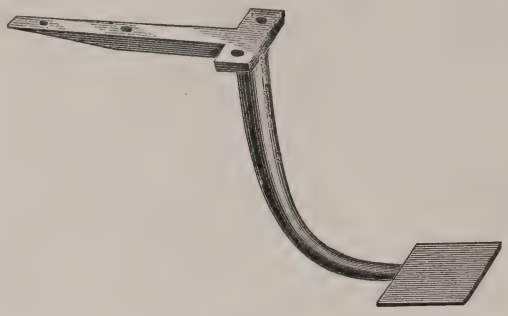
Double Star Pattern.

PRICES.

No. 40	Star Pattern, 3 by 3½ inches .....per dozen pairs		$14 00
" 41	" 3½ by 4 "	"	14 00
" 42	Double Star Pattern, 3 by 3½ inches..	"	14 00
" 43	" " 3½ by 4 " ..	"	14 00

SIDE BAR STEPS.

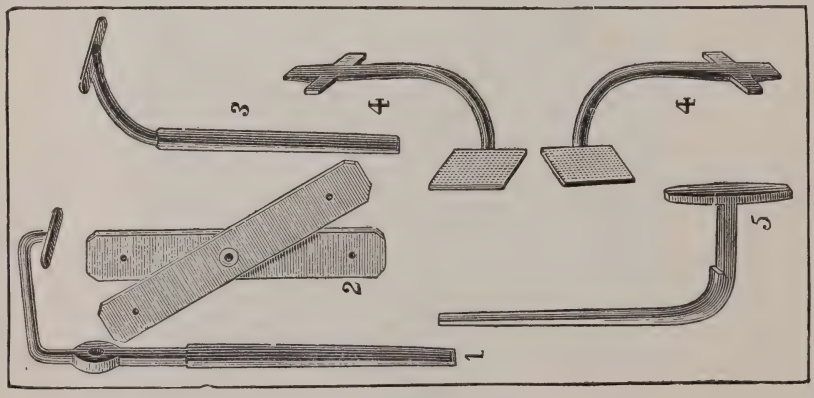
Norway Iron.



PRICES.

No. 1	Plain Step Pad, 3 by 3½ inches.....per dozen pairs		$12 00
" 2	" " 3½ by 4 "	"	13 00
" 3	Star " 3 by 3½ "	"	14 00
" 4	" " 3½ by 4 "	"	15 00
Norway Iron Shanks, separate.....		"	8 00

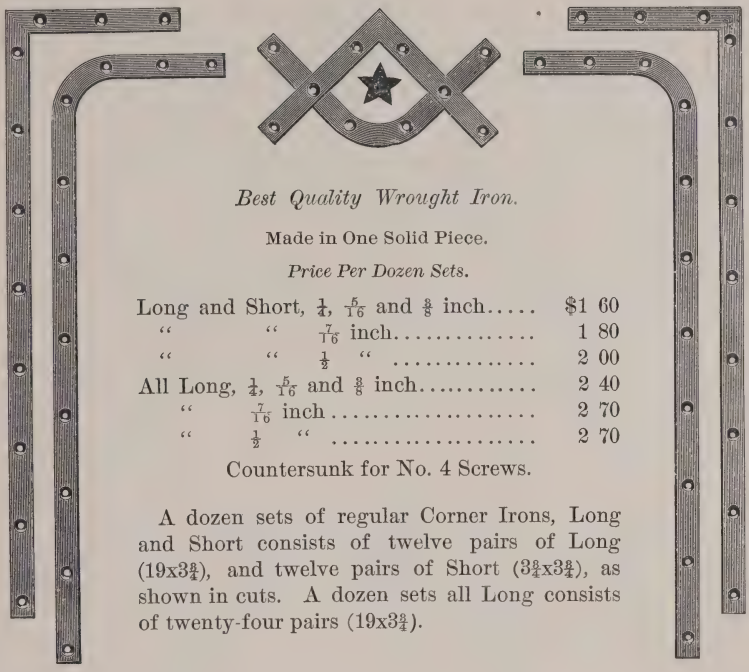
TIMKEN GEAR IRONS.



PRICES.

Light, For No. 0, 1, 2, and 2½ Springs.....	....per set	$2 25
Heavy, " 3 and 4 Springs.....	"	2 50
Spur Head King Bolts.....	each	15

BODY TOP CORNER IRONS.



Best Quality Wrought Iron.

Made in One Solid Piece.

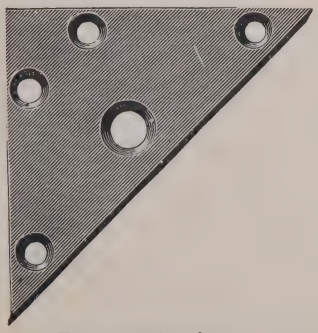
Price Per Dozen Sets.

Long and Short, $\frac{1}{4}$, $\frac{5}{16}$ and $\frac{3}{8}$ inch.....	$1 60
" " $\frac{7}{16}$ inch.....	1 80
" " $\frac{1}{2}$ "	2 00
All Long, $\frac{1}{4}$, $\frac{5}{16}$ and $\frac{3}{8}$ inch.....	2 40
" $\frac{7}{16}$ inch.....	2 70
" $\frac{1}{2}$ "	2 70

Countersunk for No. 4 Screws.

A dozen sets of regular Corner Irons, Long and Short consists of twelve pairs of Long ($19x3\frac{3}{4}$), and twelve pairs of Short ($3\frac{3}{4}x3\frac{3}{4}$), as shown in cuts. A dozen sets all Long consists of twenty-four pairs ($19x3\frac{3}{4}$).

BODY BOTTOM CORNER IRONS.



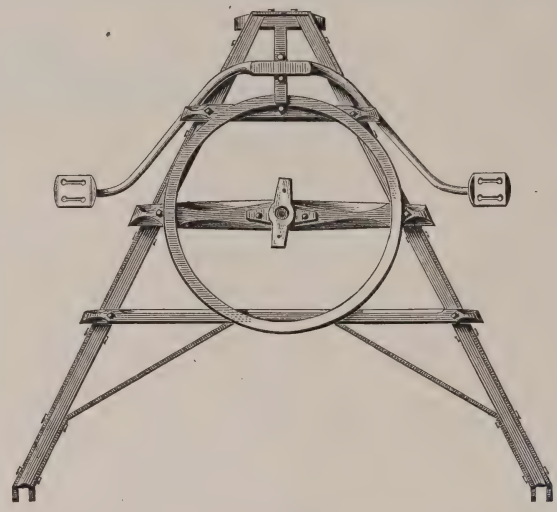
Three-quarter size.

Price.....per dozen sets 70 cents

Packed One Dozen Sets in Box.

A very desirable article to prevent the bottom Corners of Bodies from opening.

DANIELS' PLATFORM WAGON GEAR.

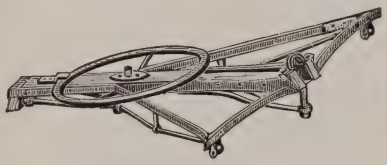


PRICE LIST.

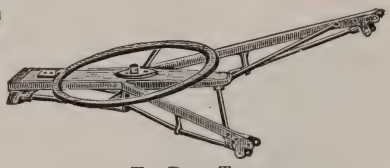
To carry 1000 lbs.....	$6 00		To carry 3000 lbs.....	$15 00	
" 1500 "	7 00		" 3500 "	17 00	
" 2000 "	8 00		" 4000 "	21 00	
" 2500 "	11 00		" 5000 "	30 00	

A Reasonable Additional Charge for Stiff Tongue Attachments.

BEACH PLATFORM WAGON GEAR.



For Stiff Tongue.



For Drop Tongue.

PRICE LIST.

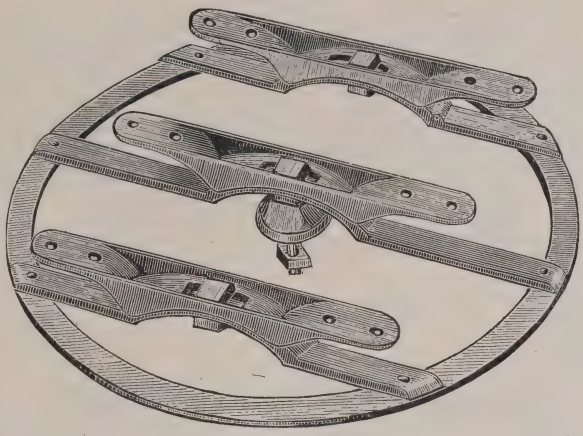
To carry 1000 lbs.....	$5 50		To carry 2500 lbs.....	$10 00	
" 1500 "	6 25		" 3000 "	13 00	
" 2000 "	8 00		" 4000 "	18 00	

In ordering Gears, give length of Side and Cross Springs from center to center of eyes and width of Steel.

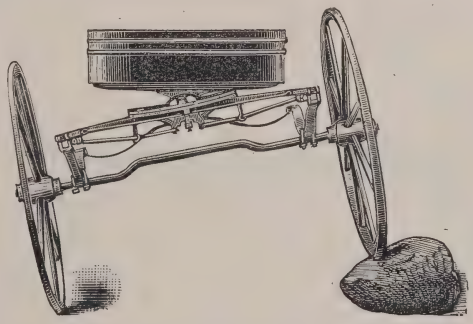
Additional Charge for Stiff Tongue Attachments.

STEVENS' PATENT OSCILLATOR.

For Platform Wagons.



Represents Oscillator attached to Upper Section of Fifth Wheels.



Represents Wagon with one Front Wheel passing over an obstruction with the Box remaining perfectly level.

It can be used on any Platform Gear with any size Fifth Wheel.

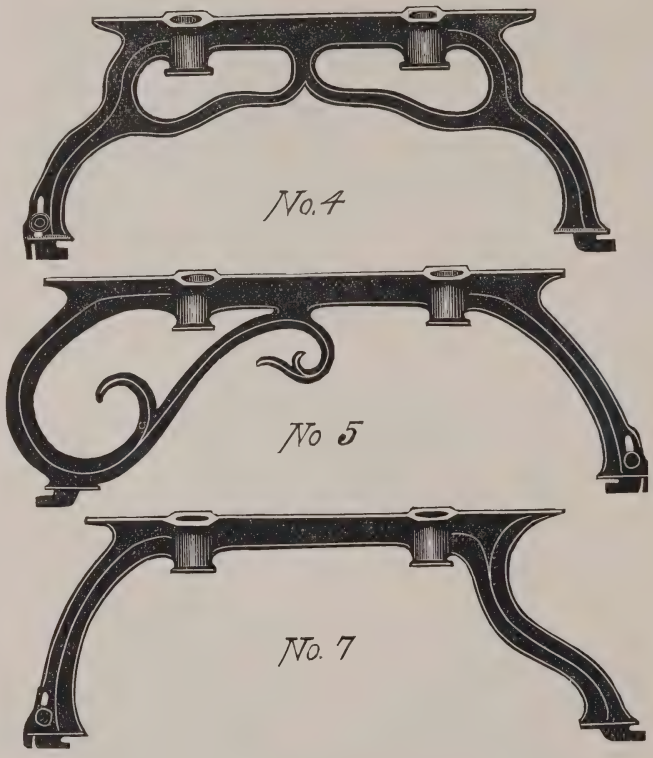
Is attached to the Fifth Wheel so that the bearing is equally distributed around the circle at six points, as well as the center, consequently the Gear will not settle under a load as if the bearing was only at a point on front and rear of circle.

It is made to operate only when either end of axle is raised or lowered, and not when box is loaded on one side more than the other.

It has been sufficiently tested in actual use, and is simple, strong and durable, and a perfect Anti-Rattler.

Price, Complete with Norway Iron Bolts .....price per set $2 00

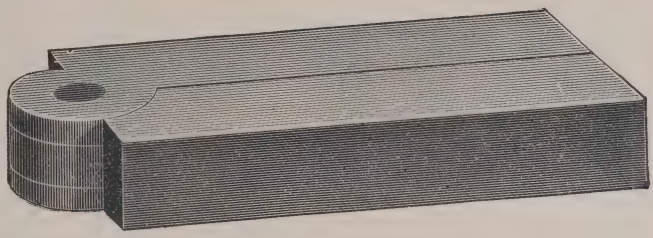
MALLEABLE IRON SEAT RISERS.



PRICES.

No. 4	Bracket Pattern,	6 inches high....per dozen pairs		$12 00
" 5	Fancy Scroll Pattern,	6 " .... "		12 00
" 7	Plain Pattern,	6 " .... "		10 00

STUMP JOINTS.



No. 1.—Full Milled.

½	inch by	½	inch	per doz		$2 10
9/16	"	½	"	"		2 35
9/16	"	9/16	"	"		2 35
⅝	"	½	"	"		2 60
⅝	"	⅝	"	"		2 60
¾	"	½	"	"		5 00
¾	"	⅝	"	"		5 00
¾	"	¾	"	"		7 50

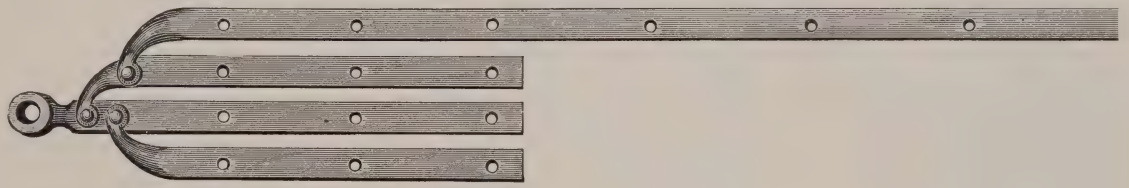
No. 2.—Milled on Two Sides.

½	inch by	½	inch	per doz		$1 55
9/16	"	½	"	"		1 65
9/16	"	9/16	"	"		1 75
⅝	"	½	"	"		1 87
⅝	"	⅝	"	"		2 00

No. 3.—Milled on One Side.

½	inch by	½	inch	per doz		$1 55
9/16	"	½	"	"		1 65
9/16	"	9/16	"	"		1 75
⅝	"	½	"	"		1 87
⅝	"	⅝	"	"		2 00

IMPROVED PHILADELPHIA PATTERN.



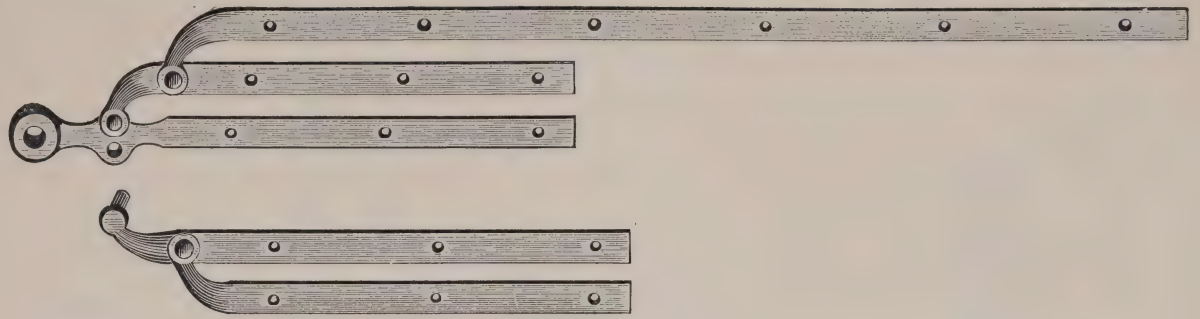
PRICE LIST.

Philadelphia	3	Bow,	One Long Bow	per dozen sets	$6 50
"	4	"	" "	"	7 50
"	4	"	Two "	"	8 50
"	5	"	" "	"	10 50

OVAL THREE BOW SOCKET PATTERN.

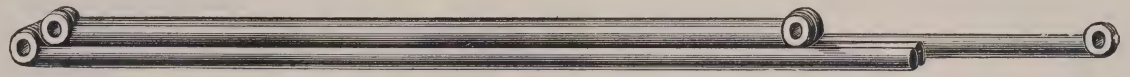
Oval 3 Bow	"	13 50

PHILADELPHIA EXTENSION SLAT IRONS.



4 Bow	per dozen sets	$15 00
5 "	"	16 50

LONG JOINT ENDS.



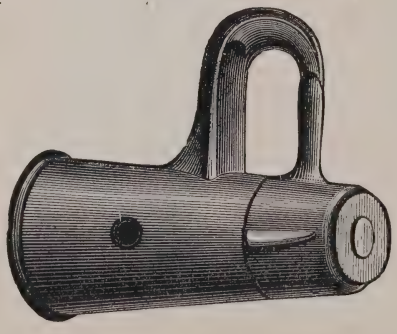
½ inch and $\frac{9}{16}$ inch Oval and $\frac{7}{16}$ inch Round	per set	42 cents
$\frac{5}{8}$ " Oval and ½ inch Round	"	45 "
$\frac{3}{4}$ " Oval	"	55 "
Short Joint Ends	"	30 "

TUBULAR BOW SOCKETS.

Oval or Square Tubes.

3 Bow Buggy	per set		$3 00
4 "	"		4 00
5 "	"		5 00
4 Bow Extension	"		4 50
5 "	"		5 50
6 "	"		6 50

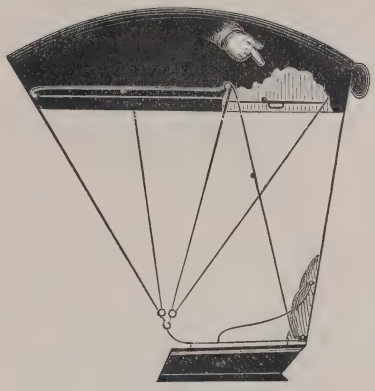
SPRING WHIFFLETREE HOOKS.



PER DOZEN PAIRS.

⅞ and 1 inch	$5 00
1⅛ inch	5 75
1¼ "	6 50
1⅜ "	7 50
1½ "	8 50

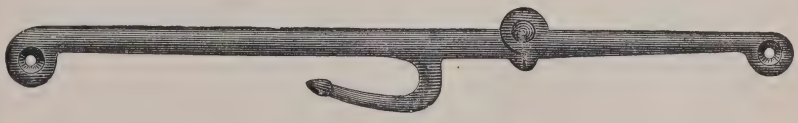
BAIRD'S CONCEALED JOINTED TOP BRACES.



PRICES.

11, 12 and 13 inch.....per dozen pairs		$3 00
17 inch, for 3 Bow and Extension Top.....	"	3 50

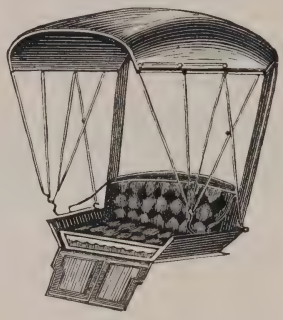
NEW YORK CONCEALED TOP BRACES.



PRICES.

11, 12 and 13 inch.....per dozen pairs		$2 50
15½ and 17 inch.....	"	3 00

CARRIAGE TOPS.



NO. 1—SUMMIT CITY TOP.

The best Top ever made for the price. Is a regular Four Bow Top, with *Wrought Iron Shifting Rail and Joints,* and can be attached to any seat. In ordering, *give measurement from out to out on top of seat at handles.*

PRICES.

Enameled Duck	$14 00
Rubber	15 00
Leather Quarters	19 00
Extra for Rubber Full Back	2 50
" Cloth or Corduroy Full Back	3 00
" Tubular Bows	2 50

NO. 2.—RUBBER TOP.

Has Square Corner Wood Seat, Wrought Iron Shifting Rail and Joints. Top made of Twenty-eight ounce Rubber and lined with all wool Carriage Cloth. Side Curtains Rubber Flock.

PRICES.

Top Complete, without Full Back, Cushion and Fall	$25 00
With Rubber Full Back, Cushion and Fall	29 50
" Corduroy " " "	31 00
" Leather or Broadcloth Full Back Cushion and Fall	34 00
Extra for Tubular Bows	2 50

NO. 4.—LEATHER QUARTER TOP.

Has Round or Square Corner Seat, either Wood or Iron. Norway Iron Shifting Rail and Joints, Wood or Tubular Bows, and Concealed Top Joints. Top Roof of Rubber. Side Curtains Rubber Flock. Lined with all wool Carriage Cloth.

PRICES.

Top Complete, without Full Back, Cushion and Fall	$35 00
With Extra Corduroy Full Back, Cushion and Fall	41 00
" Black Leather or Broadcloth Full Back Cushion and Fall	44 00
" Colored Leather Full Back, Cushion and Fall	45 00

CARRIAGE TOPS.—Continued.

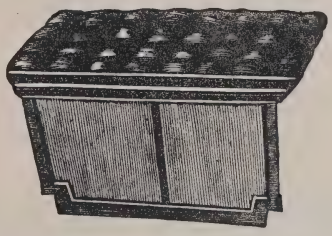
NO. 5.—LEATHER TOP.

Has Round or Square Corner Seats, either Wood or Iron. Norway Iron Shifting Rail and Joints, Wood or Tubular Bows and Concealed Top Joints. Top made of No. 1 Leather and lined with extra quality all wool Indigo dyed Carriage Cloth, with Rubber Side Curtains.

PRICES.

Top Complete, without Full Back, Cushion and Fall	$40 00
With Black Leather or Broadcloth Full Back, Cushion and Fall.	49 00
" Colored Leather Full Back, Cushion and Fall	50 00

CARRIAGE CUSHIONS AND FALLS.



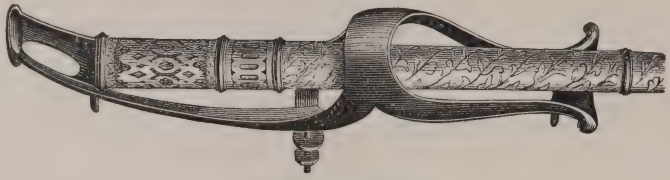
CUSHIONS WITH FALLS

No. 1	Corduroy, stuffed with Moss and Excelsior	$3 50
" 2	Broadcloth " Curled Hair and Tow	5 50
" 3	Broadcloth, extra quality " " "	6 50
" 4	Black Leather stuffed with Moss	6 00
" 5	Colored Leather stuffed with Curled Hair and Tow	7 00

CUSHIONS WITHOUT FALLS.

No. 6	Enameled Drill, Machine Sewed, Square Corner	$1 00
" 7	" " Hand Sewed, Square or Round Corner.	2 00
" 8	Rubber, Hand Sewed	2 25
" 9	Corduroy	2 50
" 10	Broadcloth	4 00
" 11	Black Leather	4 50
Plain Duck or Drill Fall	each	35
" Plain Rubber Falls	"	50
Enameled Duck Lap Aprons	"	1 00
Rubber Lap Aprons with Dash Pocket and space for Reins	"	2 00

BUFFALO WHIP SOCKETS.

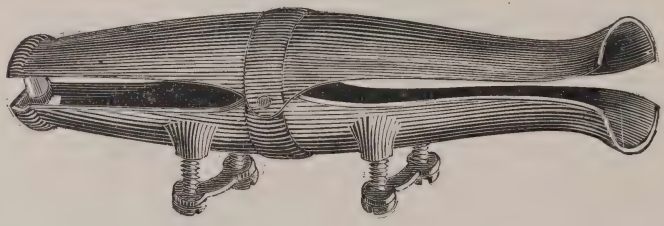


For Leather Dash.

For Wood Dash.

Leather Dash	per doz	$2 50
Wood Dash	"	2 00

WORDEN WHIP SOCKETS.

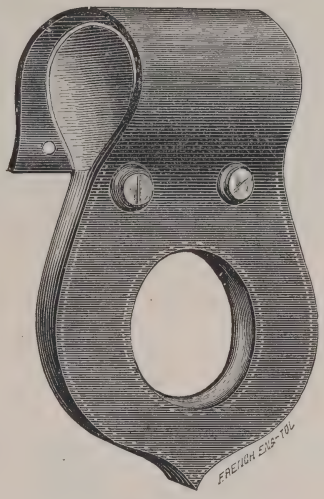


Price	per doz	$3 60

HUBBARD WHIP SOCKETS.

No. 8	Leather Dash	per doz	$3 00
" 10	Wood Dash	"	2 00

NECKYOKE LEATHERS.



For Three inch Groove on Yoke.

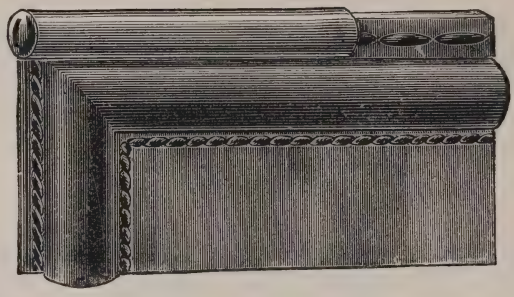
No. 1	Will fit 1	to 1¼	inch Neckyoke	per doz	$6 00
" 2	" 1⅛	to 1⅝	"	"	6 00
" 3	" 1⅛	to 2	"	"	6 00

MALLEABLE FOOT RAILS.

PRICES.

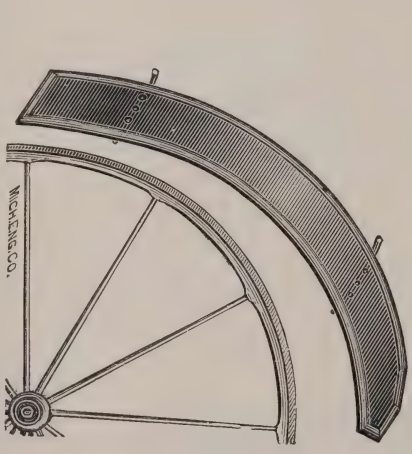
22, 23, 24 25 and 26 inch	per doz	$4 00
27 and 28 inch	"	5 00

IXL DASH MOLDING.

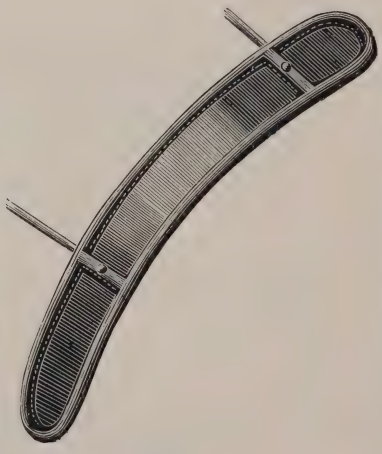


	Gold.	Silver.	Nickel.	Japanned.
Price per inch	6.	5.	3½.	2½ cents.

CARRIACE WHEEL FENDERS.



Wood.

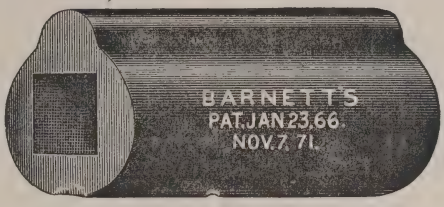


Leather.

PRICES.

Wood, Curtis' Patent	per pair	$1 50
Leather, without Iron for attaching to Body	"	2 00

BARNETT'S RUBBER TOP PROP BLOCK.

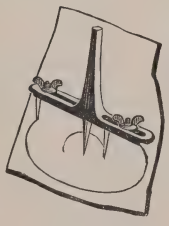


In 24 inch Strips.....per foot 50 cents

BARNETT'S RUBBER TOP BLOCK WASHER.

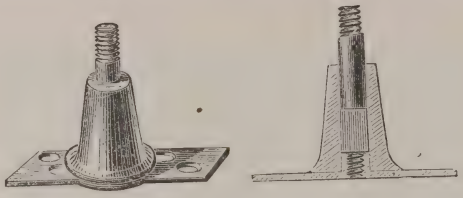
Price.....per doz 60 cents

ECONOMY WASHER CUTTER.



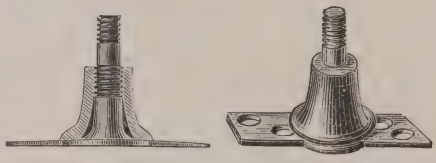
Price.....each 75 cents

SMITH'S PATENT TOP PROPS.



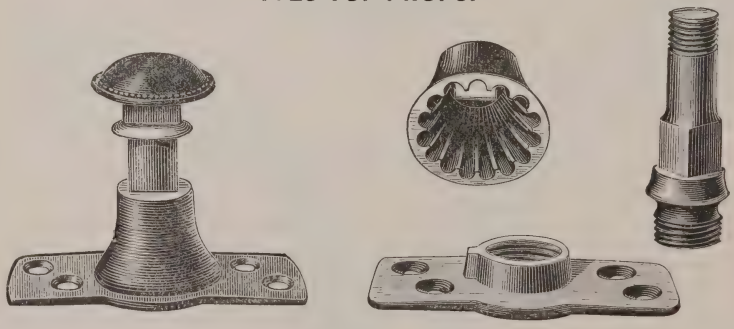
Silver or Oroide Nuts and Norway Iron Close Plate Rivets
Per set..... 90 cents

THOMAS' PATENT TOP PROPS.

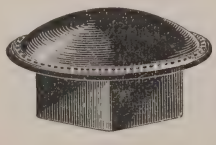


Silver or Oroide Nuts and with Norway Iron Close Plate Rivets
Per set..... 75 cents

IVES TOP PROPS.



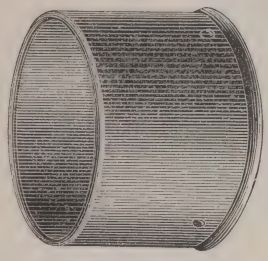
With Silver or Oroide Nuts and Rivets.....per set 55 cents
" Black Enameled Nuts and Plain Iron Rivets..... " 45 "



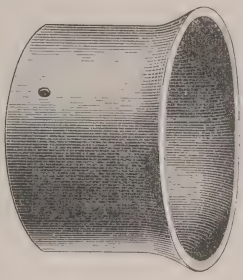
TOP PROP NUTS AND RIVETS.

Silver or Oroide Nuts.....per gross $4 00
" " Rivets..... " 4 00

CARRIAGE BANDS.



Rim Pattern.



Bell Pattern.

MALLEABLE IRON RIM BANDS.

1¾ *inches deep.*

Diameter	2 to 3	3⅛	3¼	3⅜	3½	3⅝	3¾	3⅞	4 inches
Per set	25	29	33	37	41	45	49	53	57 cents

SILVER RIM BANDS.

1¾ *inches deep.*

Diameter	2 to 2½	2⅝	2¾	2⅞	3	3⅛	3¼ inches
Per set	$1 25	$1 30	$1 35	$1 40	$1 45	$1 50	$1 55

MALLEABLE IRON BELL BANDS.

1¾ *inches deep.*

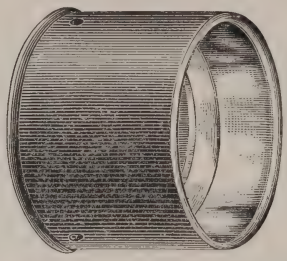
Diameter	2 to 3	3⅛	3¼	3⅜	3½ inches
Per set	28	32	36	40	44 cents

SILVER BELL BANDS.

1¾ *inches deep.*

Diameter	2 to 2½	2⅝	2¾	2⅞	3 inches
Per set	$1 40	$1 45	$1 50	$1 55	$1 60

EUREKA CENTRAL PARK BANDS.

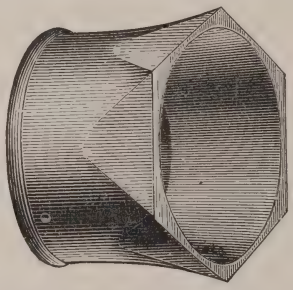


Inside and Front Finished.—To Paint Outside,

LIST FOR SILVER AND GOLD.

Size	2 to 2½	2⅝	2¾	2⅞	3	3⅛	3¼
1¾ in. deep	$1 25	$1 30	$1 35	$1 40	$1 45	$1 50	$1 60
2 "	1 55	1 60	1 65	1 70	1 75	1 85	1 95

COMPOSITION ROCKAWAY BANDS.



Two Round and Two Hexagon Bands to Set.

LIST FOR SILVER AND GOLD.

Size	2	2¼	2⅜	2½	2⅝	2¾ inches
2 in. deep	$4 05	$4 05	$4 05	$4 05	$4 20	$4 35 per set

Size	2¾	2⅞	3	3⅛	3¼	3⅜	3½ inches
2¼ in. deep	$5 70	$5 85	$6 00	$6 10	$6 25	$6 35	$6 50 per set

MALLEABLE IRON ROCKAWAY BANDS.

Size	2	2⅛	2¼	2⅜ inches
2 inches deep	42 cents	42	42	42 per set

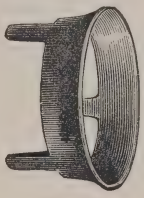
Size	2½ to 3	3⅛	3¼	3⅜	3½ inches
2¼ in. deep.	52 cents	57	62	67	72 per set

CARRIAGE SAND BANDS.

Diameter	1¾ to 2½	2¾	3	3¼	3½	inches
Silver	50 cents	55	60	70	75	per set
Malleable	12 "	12	12	14	16	"

MALLEABLE SAND BANDS.

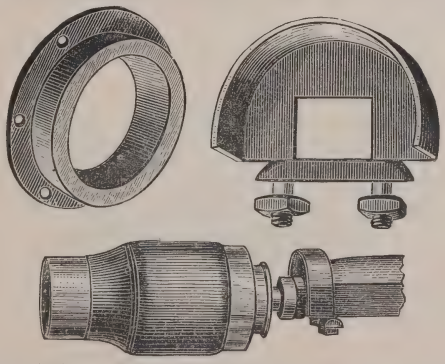
Be l Pattern to Drive.



No. 543.

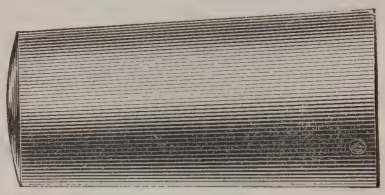
1¾ to 3 inches inside small end.....per lb .. cents

COMMON SENSE SAND AND MUD BANDS.



For Iron Axles ⅞, 1, 1⅛, 1¼, 1⅜ and 1½ inches.....per dozen sets $10 00
" Thimble Skeins 3, 3¼ and 3½ inches ..... " 15 00

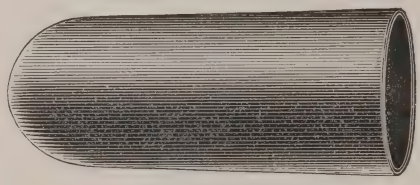
PLAIN SHAFT TIPS.



No. 5.—1½ inches long,

Size Hole	⅞	1	1⅛ inches
Silver or Oroide	$1 20	$1 30	$1 50 per doz pairs
Japanned	75	....	.... "

ROUND END SHAFT TIPS.

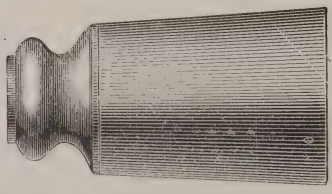


Silver or Oroide.

Size Hole	¾	⅞	1 inch
No. 80, 1¾ inches long	$1 45	$1 50	$1 75 per doz pairs
" 100, 2 "	2 20	2 45	2 80 "

BALL SHAFT TIPS.

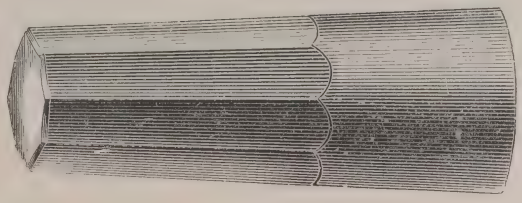
No. 20.



Silver or Oroide.

Size	¾ x 1¾	⅞ x 1¾	1 x 2	1⅛ x 2¼	1¼ x 2⅜
Per dozen pairs	$1 95	$2 10	$2 31	$3 00	$3 60

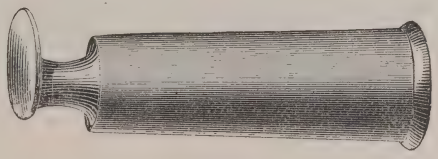
OCTAGON SHAFT TIPS.



No. 15.

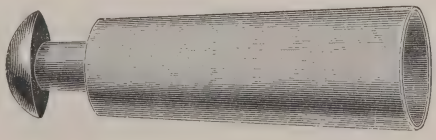
Size	⅞ by 2¼	⅞ x 2½	1 x 2½ inches
Silver	$6 00	$7 00	$8 50 per dozen pairs
Gold	7 25	8 75	10 25 "

WHIFFLETREE TIPS.



No. 2.

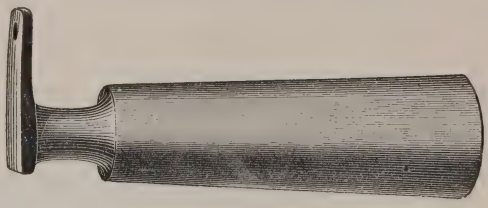
Size Hole	¾	⅞	1 inch
Japanned	$....	$2 25	$2 55 per dozen pairs
Silver or Oroide	5 40	5 70	6 80 "



No. 3.

Size Hole	¾	⅞	1 inch
Silver or Oroide	$5 40	$5 70	$6 80 per dozen pairs

WHIFFLETREE TIPS.

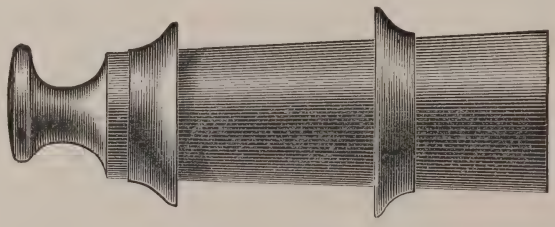


No. 5.

Size Hole	¾	⅞	1 inch
Silver or Oroide	$6 00	$6 30	$7 40 per dozen pairs

No. 4.—OCTAGON.

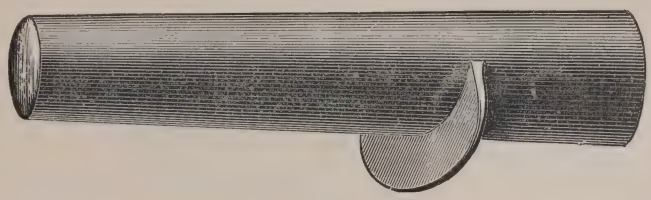
Size Hole	¾	⅞	1	1⅛ inches
Silver or Oroide	$8 55	$9 15	$11 40	$14 85 per dozen pairs
Gold	10 25	10 80	13 70	17 70 "



No. 10.—FLANGED.

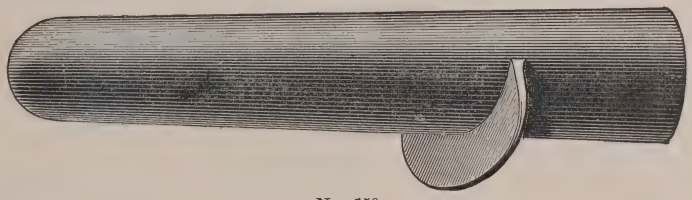
Size Hole	1	1⅛	1¼	1⅜ inches
Silver or Oroide	$15 40	$17 10	$19 40	$22 80 per dozen pairs

POLE TIPS.



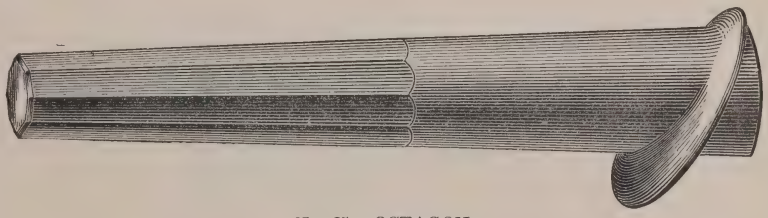
No. 15.

Length	6	6¼	6½ inches
Size Hole	1⅛	1¼	1⅜ "
Silver or Oroide	$8 10	$8 70	$9 60 per dozen
Japanned	3 60	3 90	4 35 "



No. 150.

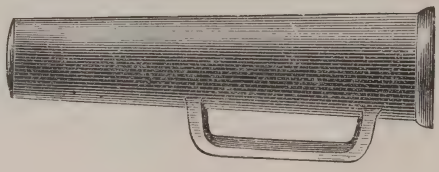
Length	6¼	6½	6¾ inches
Size Hole	1⅛	1¼	1⅜ "
Silver or Oroide	$9 00	$9 60	$10 50 per dozen



No. 25.—OCTAGON.

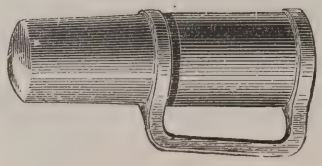
Length	7	7¼	7½	7⅞ inches
Size Hole	1	1⅛	1¼	1⅜ "
Silver or Oroide	$13 50	$13 80	$14 40	$15 60 per dozen
Gold	15 60	16 20	16 80	18 60 "

NECKYOKE TIPS.



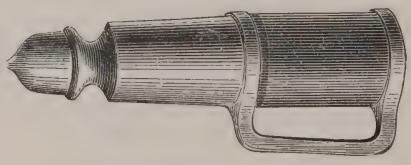
No. 6.

Size Hole	¾	⅞	1 inch
Silver or Oroide	$6 90	$7 20	$9 00 per dozen pairs
Japanned	....	3 00	3 30 "



No. 7.

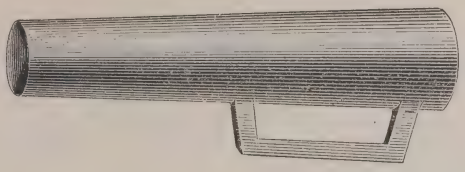
Size Hole	¾	⅞	1 inch
Silver or Oroide	$6 30	$6 60	$8 40 per dozen pairs
Japanned	....	2 70	3 00 "



No. 8.

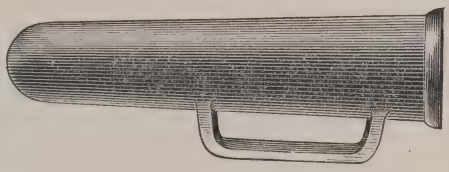
Size Hole	¾	⅞	1 inch
Silver or Oroide	$7 20	$7 50	$9 60 per dozen pairs

NECKYOKE TIPS.



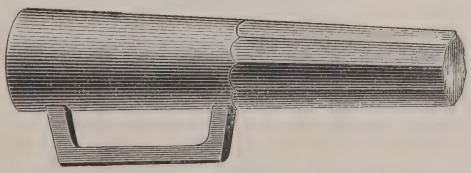
No. 10.

Size Hole	$\frac{3}{8}$	$\frac{7}{8}$	1 inch
Silver or Oroide	$8 10	$8 40	$10 20 per dozen pairs



No. 60.

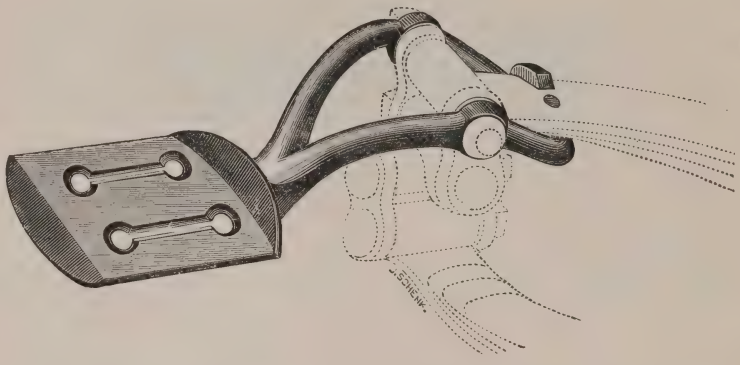
Size Hole	$\frac{3}{4}$	$\frac{7}{8}$	1 inch
Silver or Oroide	$7 50	$8 10	$9 90 per dozen pairs



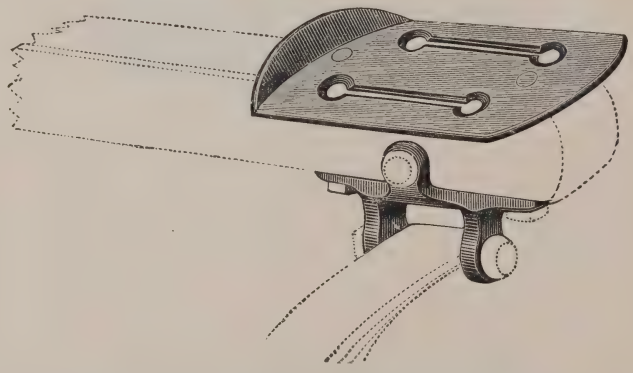
No. 11.—Octagon.

Size Hole	$\frac{3}{4}$	$\frac{7}{8}$	1 inch
Silver or Oroide	$12 60	$13 20	$15 00 per dozen pairs
Gold	16 20	16 80	18 60 "

CONDERMAN'S PATENT PLATFORM SPRING WAGON STEPS.



No. 434 For Front Springs $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches..Price per pair 40 cents



No. $434\frac{1}{2}$ $1\frac{3}{8}$ inch. Combined Step and Coupling for Back Spring and Wagon Bed.....price per pair 40 cents

By reference to the above cuts, it will be seen that the use of the Conderman's Patent Platform Spring Wagon Step, for Front Spring, saves the labor of making a wrought shank, and permits the Step to be attached to the spring without the use of an extra bolt; the hook which clasps the spring, holding the step firmly in its place, and giving additional strength to the spring.

The Combined Step and Coupling, for use on the wagon bed, saves all extra bolts, and can be attached in ten minutes, thus securing an important saving of time and labor.

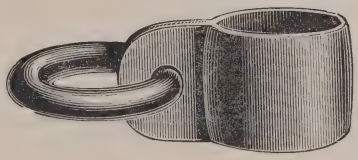
MALLEABLE IRON.

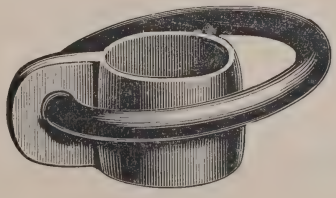
Price per pound Plain Castings..... .....cents
" " Core " .... "

WHIFFLETREE FERRULES.

No. 201 Round—$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{5}{8}$, $1\frac{3}{4}$, 2 inch
Measure inside small end.

No. 203 Close End—$\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$ inch.
Measure inside large end.

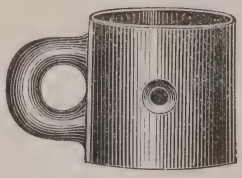
No. $203\frac{1}{2}$  Ring in Eye.
$1\frac{3}{8}$ inch.

No. $203\frac{3}{4}$  Neck Yoke Ferrule.
Oval Ring in Eye.
$1\frac{3}{8}$ inch.

MALLEABLE IRON.—CONTINUED.

WHIFFLETREE FERRULES, WITH EYE.

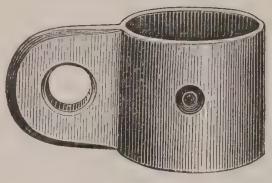
No. 204



$1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inch.

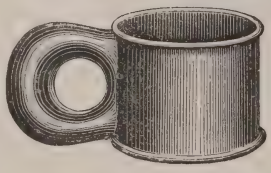
$1\frac{3}{4}$ inch deep.

No. 204$\frac{1}{2}$



Heavy—$1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inch.

No. 205

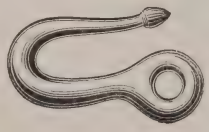


Center Iron.

$2\frac{1}{4}$, $2\frac{3}{8}$, $2\frac{1}{2}$, $2\frac{3}{4}$ inch.

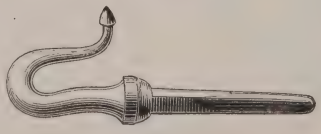
STAY CHAIN HOOKS.

No. 237



$4\frac{1}{8}$ inches long, $\frac{5}{8}$ inch eye.

No. 238



For Axle.

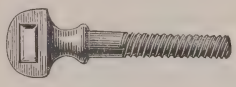
$4\frac{1}{2}$ inches long in shank.

MALLEABLE IRON.—CONTINUED.

WHIFFLETREE TONGUES.

No. 210 Plain Shank with shoulder. $2\frac{3}{4}$ inches long, $\frac{5}{16}$ inch shank.

No. 211 Same pattern. $3\frac{1}{4}$ inches long, $\frac{3}{8}$ inch shank.

No. 212  With shoulder to screw. $2\frac{3}{4}$ inches long, $\frac{5}{16}$ inch shank.

No. 213 Same pattern. $3\frac{1}{4}$ inches long, $\frac{3}{8}$ inch shank.

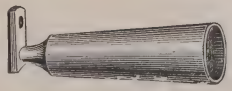
No. 214 With shoulder to screw. $3\frac{1}{2}$ inches long, $\frac{7}{16}$ inch shank.

No. $214\frac{1}{2}$ Same pattern. $2\frac{7}{8}$ inches long, $\frac{3}{8}$ inch shank.

No. 215 Plain shank, with shoulder. $3\frac{1}{2}$ inches long, $\frac{7}{16}$ inch shank.

No: 216 With socket. 4 inches long, $\frac{7}{8}$ and 1 inch inside large end.

No. 217 With socket. 4 inches long, $\frac{7}{8}$ and 1 inch inside large end.

No. $217\frac{1}{2}$  With Socket. $3\frac{7}{8}$ inches long. $\frac{7}{8}$, 1, $1\frac{1}{8}$ inch inside large end.

No. 218 Plain shank, with shoulder. $3\frac{1}{4}$ inches long, $\frac{3}{8}$ inch shank.

MALLEABLE IRON.—CONTINUED.

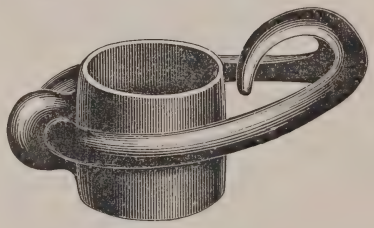
WHIFFLETREE HOOKS.

No. 231 To screw. $3\frac{1}{4}$ inches long; right and left.

No. 233 $1\frac{1}{4}$ inch hole small end; right and left.

No. 234

1 inch hole small end; right and left.
$1\frac{1}{8}$ " " " "
$1\frac{1}{4}$ " " " "
$1\frac{3}{8}$ " " " "
$1\frac{1}{2}$ " " " "

No. 235  Ferrule, $1\frac{3}{4}$ inch.

Inside small end.

WHIFFLETREE PLATES.

No. 270 $3\frac{1}{4}$ inches long.

No. 271 5 inches long.

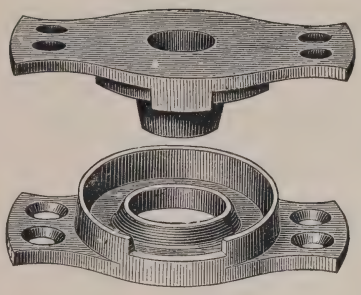
No. 272 3 inches long.

No. 273 4 inches long.

No. 275 Heavy Pattern, $4\frac{1}{2}$ inches long.

MALLEABLE IRON.—Continued.

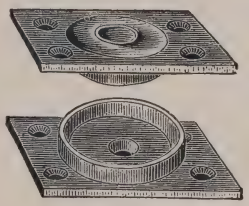
WHIFFLETREE COUPLINGS.—In Pairs.



No. 239

With Stop.

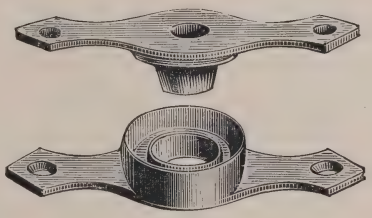
{ 1¾ inches wide.
{ 3½ inches long.



No. 240

1⅜ inch wide, 2¼ inches long, to screw on.

Designed for light work. Can be used with leather washer to prevent rattling.

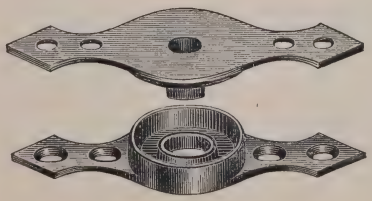


No. 241

Deep pattern.

{ 1⅜ inch wide,
{ 3⅞ inches long.

Can be used with leather washer to prevent rattling.



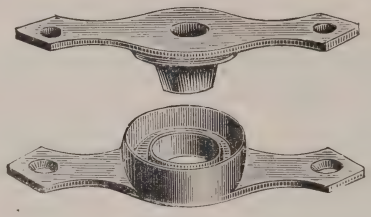
No. 241½

Deep pattern.

{ 2 inches wide,
{ 5 " long.

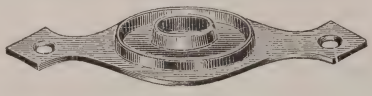
MALLEABLE IRON.—CONTINUED.

WHIFFLETREE COUPLINGS.—In Pairs.



No. 241¼ — Deep pattern. 1⅝ inches wide, 4½ inches long.

No. 241⅜ — Same pattern. 1⅝ inches wide, 4 inches long.



No. 242 — 1⅛ inches wide, 3⅞ inches long.

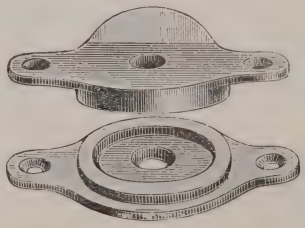
No. 243 — 1⅛ inches wide, 4½ inches long.

No. 243½ — Same pattern. 1½ inches wide, 4⅛ inches long.

No. 243¾ — Same pattern. 2 inches wide, 4¾ inches long.

No. 244 — Same pattern. 2⅛ inches wide, 5 inches long.

No. 245 — Same pattern. 2½ inches wide, 6 inches long.

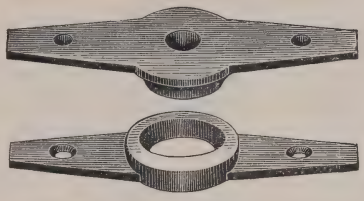


No. 249 — 2⅛ inches wide, 3¾ inches long.

MALLEABLE IRON.—Continued.

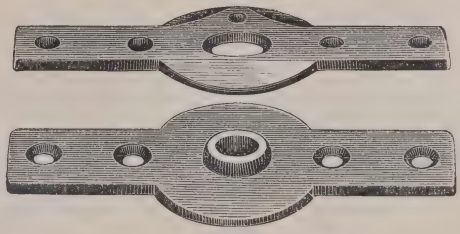
BOLSTER PLATES FOR PLATFORM WAGONS.

No. 255



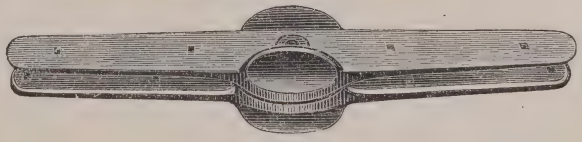
2⅛ inches wide,
5¾ inches long.

No. 256



3 inches wide,
8 inches long.

No. 257



20 inches long, 1⅞ inches between Clips, ⅝ inch Hole.

HOLD BACKS.

No. 290

5½ inches long.

No. 292

4¼ inches long.

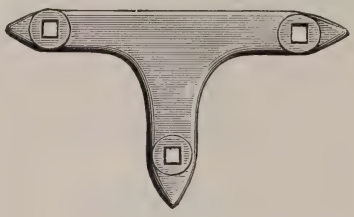
No. 293

Large size.
1½ inches from Staple to Bolt Hole.
Shank, ⅝ inch plump.

MALLEABLE IRON.—CONTINUED.

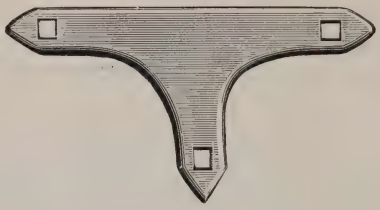
T AND SHAFT IRONS.

No. 297



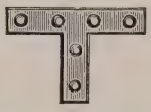
$5\frac{1}{2}$ inches long.
$3\frac{3}{8}$ inches high.

No. $297\frac{1}{2}$



$6\frac{1}{4}$ inches long.
$3\frac{1}{2}$ inches high.

No. 298



$2\frac{3}{4}$ inches long x $2\frac{1}{8}$ inches high.

No. 299 Same pattern. $3\frac{3}{8}$ inches long x $2\frac{1}{2}$ inches high.

No. 300 Same pattern. $3\frac{3}{4}$ inches long x $2\frac{3}{4}$ inches high.

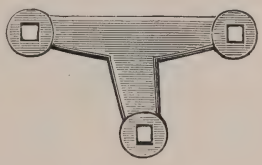
No. 301

$4\frac{1}{3}$ inches long x $2\frac{3}{4}$ inches high.

MALLEABLE IRON.—Continued.

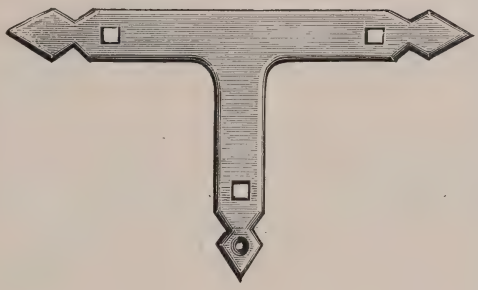
T AND SHAFT IRONS.

No. 302



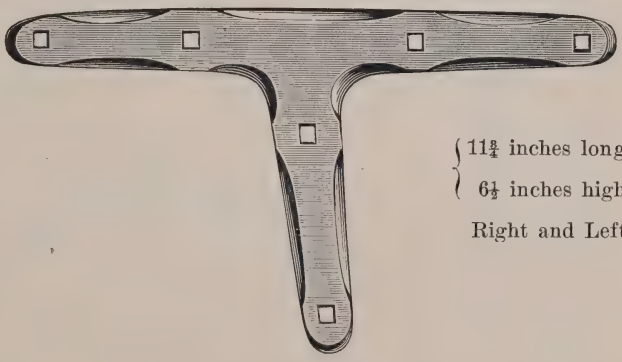
$4\frac{1}{4}$ inches long x $2\frac{3}{8}$ inches high.
Right and Left.

No. 303



$8\frac{1}{4}$ inch. long,
5 inch. high.
Right and Left.

No. 304

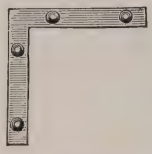


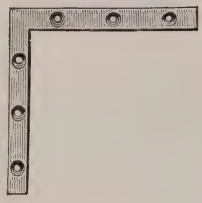
$11\frac{3}{4}$ inches long,
$6\frac{1}{2}$ inches high.
Right and Left.

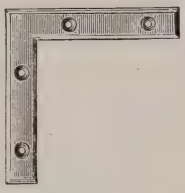
MALLEABLE IRON.—CONTINUED.

CORNER IRONS.

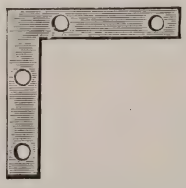
(Measures taken outside.)

No. 305  $\frac{3}{8}$ x $1\frac{1}{4}$ inches.

No. 306  $\frac{3}{8}$ x $3\frac{1}{2}$ inches.

No. 308  Beveled edge. $\frac{3}{8}$ inch x $3\frac{3}{8}$ inches.

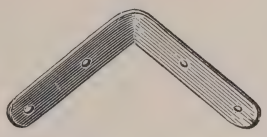
No. 309 Same pattern. $\frac{3}{4}$ inch x $3\frac{1}{2}$ inches.

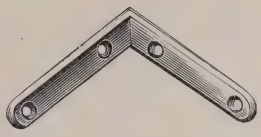
No. 307  Square edge. $\frac{5}{16}$ inch x $2\frac{1}{2}$ inches.

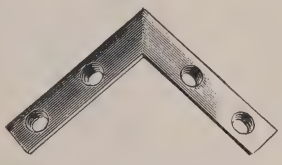
No. 310	Pattern as above,	$\frac{7}{16}$	inch x	$1\frac{5}{8}$	inches.
No. 311	" "	$\frac{1}{2}$	" x	$2\frac{1}{4}$	"
No. 312	" "	$\frac{1}{2}$	" x	$2\frac{3}{4}$	"
No. 313	" "	$\frac{11}{16}$	" x	$3\frac{1}{2}$	"
No. 314	" "	$\frac{5}{8}$	" x	$2\frac{3}{4}$	"
No. 315	" "	$\frac{7}{8}$	" x	4	"

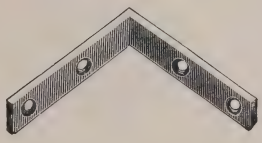
MALLEABLE IRON.—CONTINUED.

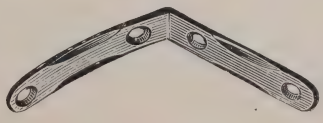
CORNER IRONS.

No. 317 
$3\frac{1}{2}$ inches long x $\frac{3}{4}$ inch wide.
Slightly beveled.

No. 318 
$2\frac{3}{4}$ inches long x $\frac{1}{2}$ inch wide.
Beveled corners.

No. $318\frac{1}{2}$ 
$2\frac{1}{2}$ inches long, $\frac{1}{2}$ inch wide.
Beveled for top of square corner seats.

No. 319 
$2\frac{5}{8}$ inches long x $\frac{9}{16}$ inch wide.
For inside square corners.

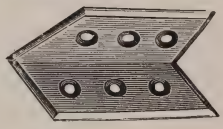
No. 320 
$3\frac{1}{4}$ inches long x $\frac{9}{16}$ inch wide.
Bevel corners, right and left.

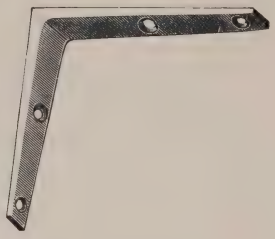
No. 321 { Similar pattern, but curved slightly more and heavier.
$3\frac{1}{2}$ inches long x $\frac{5}{8}$ inch wide. Bevel corners, right and left.

MALLEABLE IRON.—CONTINUED.

CORNER IRONS.

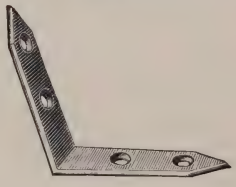
No. 322 $3\frac{1}{2}$ inches long x 1 inch wide.

No. $322\frac{1}{2}$  For inside beveled corners. $2\frac{3}{8}$ inches long x 1 inch wide. In pairs. Right and Left.

No. 323  Beveled Corners. $4\frac{7}{8}$ inches long x $\frac{5}{4}$ inch wide. Heavy.

No. 326 Beveled Corners. Same pattern as No. 323. 4 inches long x $\frac{5}{4}$ inch wide.

No. 327 4 inches long x $\frac{7}{8}$ inch wide. For heavy work.

No. 328  Inside Corner Iron. For seats. $3\frac{5}{8}$ inches long x $\frac{7}{8}$ inch wide.

No. $328\frac{1}{2}$ For top of seats. $3\frac{7}{8}$ inches long x $\frac{13}{16}$ inch wide.

MALLEABLE IRON.—CONTINUED.

WHIFFLETREE BRACES.

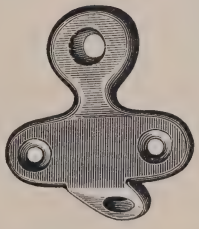
No. 260

Inside measure 3 inches.

No. 261

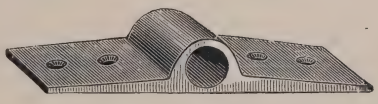
Inside measure $3\frac{3}{4}$ inches.

No. 330



For sliding seats in carriages.

No. 331



New pattern. For sliding seats in carriages and wagons. $3\frac{1}{2}$ inches long. $\frac{7}{16}$ inch hole.

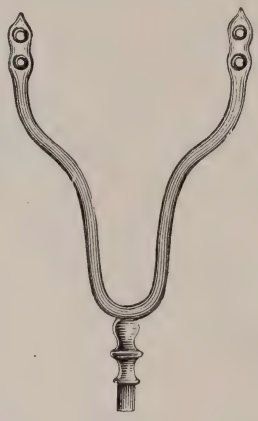
No. 332

For shifting seats short distances.

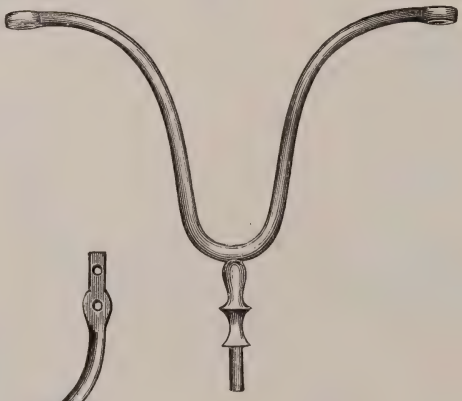
Measures 2 inches from center to center of holes.

MALLEABLE IRON.—CONTINUED.

BACK STAY IRONS.



No. 334 — 8 inches high.

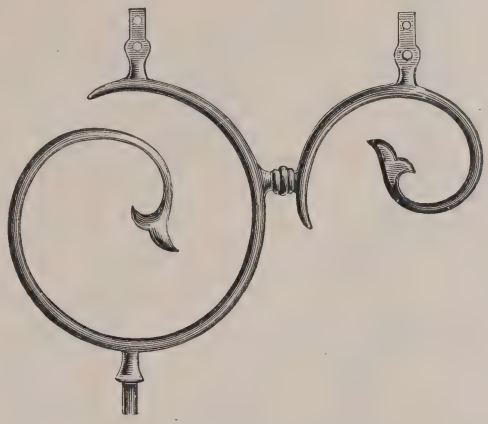


No. 335 — 7 inches high.

No. 335½ — 11 inches high.

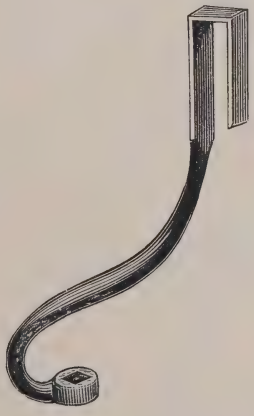
MALLEABLE IRON.—CONTINUED.

BACK STAY IRONS.



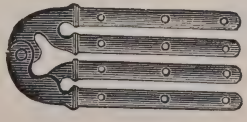
No. 336½ — 10 inches high.

WAGON BOX BRACE.



No. 332½ — 8 inches high.

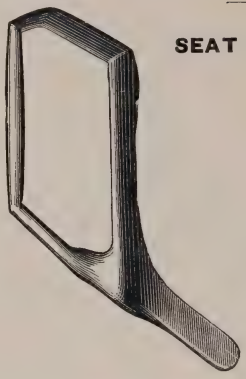
BOW IRONS.



No. 375 — For Four Bows.

MALLEABLE IRON.—CONTINUED.

SEAT HANDLES.

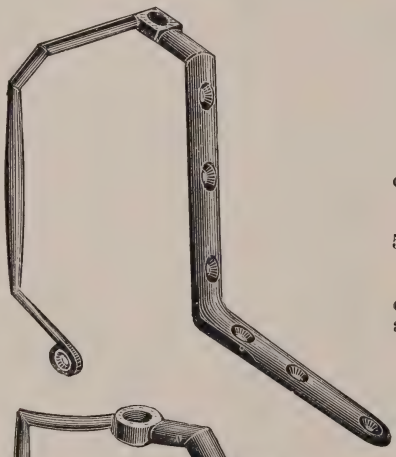


No. 337

Right and left with Corners.

combined.

Width of Seat Back, 4¾ inches.



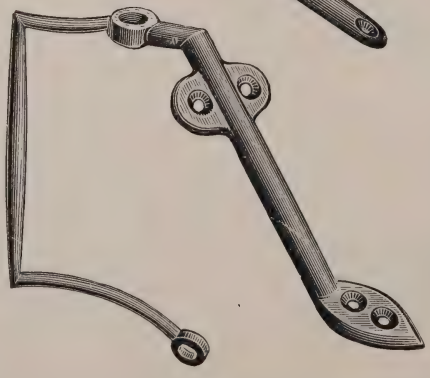
No. 337½

Right and left.

For Three-Spring Wagons and light work.

Width of Seat Back, 5 inches.

May be used with Braces Nos. 338½ and 338¾, and with No. 339¾.



No. 337¾

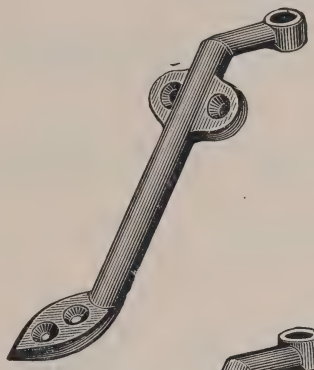
Right and left.

Width of Seat Back, 4¼ inches.

May be used with Braces Nos. 339 and 339½.

MALLEABLE IRON.—Continued.

SEAT BRACES.

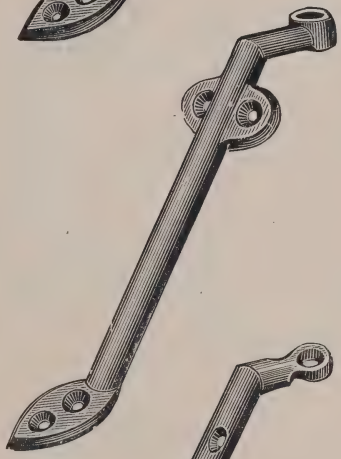


No. 339

For shifting Rail.

Width of Seat Back, 4½ inches.

May be used with Handle No. 337⅞



No. 339½

For shifting Rail.

Width of Seat Back, 6 inches.

May be used with Handle No. 337⅞.

No. 339¾

For shifting Rail.

Width of Seat Back, 6¼ inches.

May be used with Handle No. 337½.

MALLEABLE IRON.—CONTINUED.

CHECK LOOPS.

No. 345

⅞, 1, 1⅛, 1¼, 1½, 1⅝ inches.
Also, 2¾ inches for Neck Yokes.

FOOTMAN LOOPS.

No. 346

⅞ and 1⅝ inches.

SAFETY LOOPS FOR SHAFTS.

No. 340

We make this pattern in two sizes.
⅞ and 1 inch.
Measure inside the Loop.

No. 341

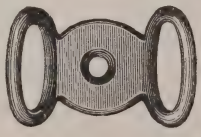
We make this pattern in two sizes.
⅞ and 1 inch
Measure inside the Loop.

BODY LOOPS.

No. 342

⅞, 1, 1⅛, 1¼, 1½ inches inside.

PERCH LOOPS.

No. 343 

⅞, 1, 1¼ and 1½ inches inside.

MALLEABLE IRON.—CONTINUED.

AXLE YOKES.

No. 350 Usual sizes, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches.

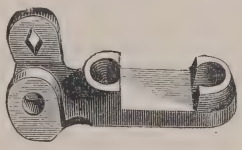
No. 353 Usual plain pattern. Sizes $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches.

No. $353\frac{1}{2}$ Same pattern. Extra heavy. $1\frac{1}{2}$, $1\frac{3}{4}$ inches.

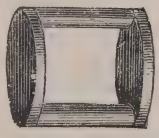
AXLE YOKE WITH LOOP.

No. 378 $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$ inches.

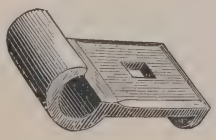
AXLE YOKE AND SHAFT COUPLING COMBINED.

No. 352  1. $1\frac{1}{8}$, $1\frac{1}{4}$ inches.

SIDE SPRING SHACKLES.

No. 355  $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches.

SPRING SHACKLE HOLDERS.

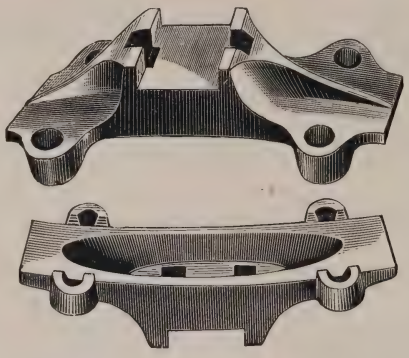
No. 360 

$1\frac{1}{4}$ (with $1\frac{1}{4}$ inch bearing)
$1\frac{1}{2}$ (" $1\frac{1}{4}$ " ")
$1\frac{3}{4}$ (" $1\frac{1}{2}$ " ")
2 (" $1\frac{1}{2}$ " ")

MALLEABLE IRON.—CONTINUED.

SPRING AND AXLE BLOCKS.

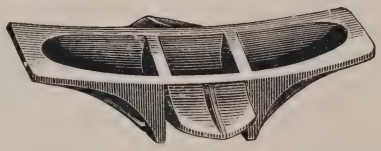
No. 357



The two cuts show this favorite Spring and Axle Block. The sizes furnished being as follows:

For 1 inch Axle and 1¼ inch Spring.
For 1⅛ inch Axle and 1¼ inch Spring.
For 1¼ inch Axle and 1½ inch Spring.
For 1⅜ inch Axle and 1½ inch Spring.

No. 357½



5½ inches long. For 1⅛ inch Axle and 1¼ inch Spring.

No. 357¾ Same pattern.

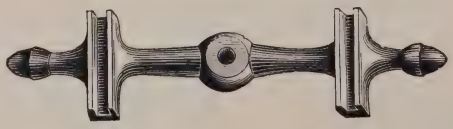
5½ inches long. For 1¼ inch Axle and 1½ inch Spring.

SPRING SADDLE CLIP PLATES.

No. 361

Plain pattern. 1¼, 1⅜, 1½, 1¾ inches.

No. 362

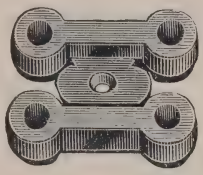


Acorn pattern, 1¼, 1⅜, 1½ inches.

MALLEABLE IRON.—CONTINUED.

SPRING TIES AND PLATES.

No. 358



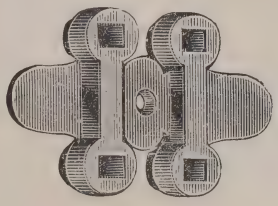
Bottom plate. For $1\frac{1}{8}$ inch Axle and $1\frac{3}{8}$ inch Spring.

No. $358\frac{3}{4}$ Same pattern. Bottom plate. For 1 inch Axle and $1\frac{1}{4}$ inch Spring.

No. 359 Same pattern. Bottom plate. For $1\frac{1}{8}$ inch Axle and $1\frac{1}{4}$ inch Spring.

No. $359\frac{1}{2}$ Same pattern. Bottom plate. For $1\frac{1}{4}$ inch Axle and $1\frac{1}{2}$ inch Spring.

No. 358 A

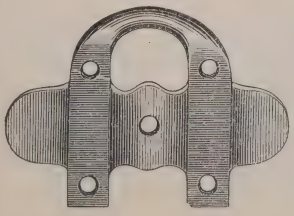


Top plate. For $1\frac{1}{8}$ inch Axle and $1\frac{3}{8}$ inch Spring.

No. 359 A Same pattern. Top plate. For $1\frac{1}{8}$ inch Axle and $1\frac{1}{4}$ inch Spring.

No. $359\frac{1}{2}$ A Same pattern. Top plate. For $1\frac{1}{4}$ inch Axle and $1\frac{1}{2}$ inch Spring.

No. 363



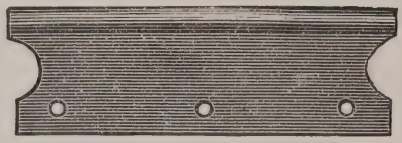
$1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ and $1\frac{3}{4}$ inches.

MALLEABLE IRON.—CONTINUED.

WEAR IRONS.

No. 380 — $2\frac{3}{4}$ inches long.
" 381 — $4\frac{3}{8}$ " "
" 382 — 5 " "

No. 383



$6\frac{1}{2}$ inches long,
$2\frac{1}{8}$ " wide.

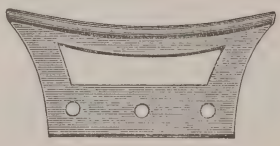
No. 384

$6\frac{1}{2}$ inches long,
$2\frac{1}{4}$ " wide.

No. 385

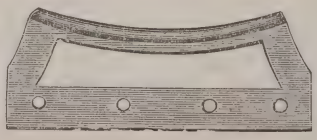
$6\frac{1}{2}$ inches long,
$2\frac{1}{8}$ " wide.

No. 386



$3\frac{7}{8}$ inches long,
2 " wide.

No. 387

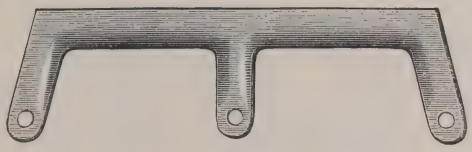


$5\frac{3}{4}$ inches long,
$1\frac{7}{8}$ " wide.

MALLEABLE IRON.—Continued.

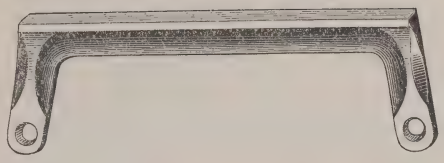
WEAR IRONS.

No. 388



6½ in. long,
2¼ " wide.

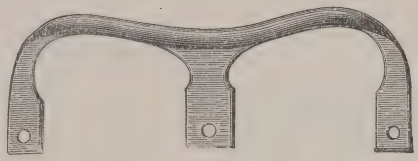
No. 388½



6½ inches long,
2¼ " wide.

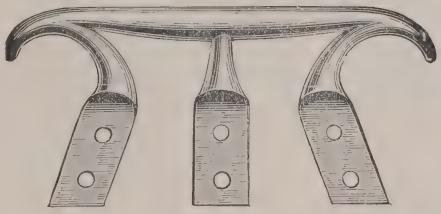
With stop on other side. Can be used either side up.

No. 389



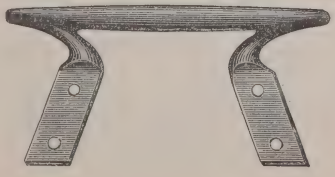
6¾ inches long,
2 " wide.

No. 390



6¾ inches long,
3 " wide.

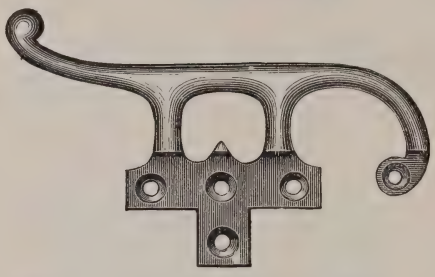
No. 391



4⅞ inch. long x 2½ inch. wide.

MALLEABLE IRON.—CONTINUED.

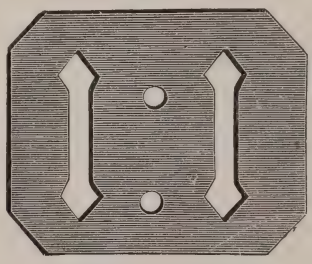
WEAR IRONS.

No. 393  6½ inches long, 3 " wide.

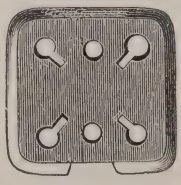
No. 397 8 inch. long, 4 " wide.

For lumber wagons.

STEP PLATES.

No. 412  3¾ x 3⅜ inches.

No. 413 Same pattern. 4½ x 3¾ inches.

No. 415  Bevel edge. 3⅜ x 3 inches.

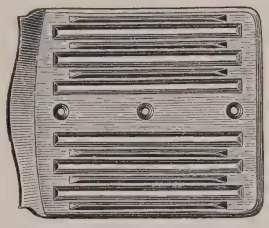
No. 416 Same pattern. 3⅜ x 3⅜ inches.

No. 417 Same pattern. 4½ x 4 "

MALLEABLE IRON.—CONTINUED.

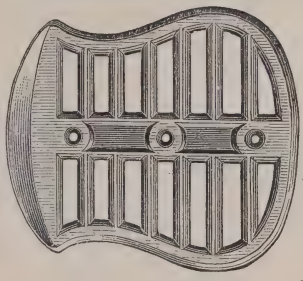
STEP PLATES.

No. 418½



3¾ x 3 inches.

No. 419

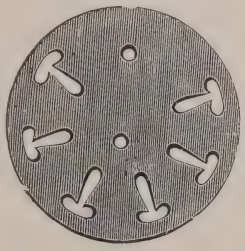


Cross Bar Pattern.
Bevel Edge.
4⅞ inches long x 4¼ inches wide.

No. 419½ Same pattern.

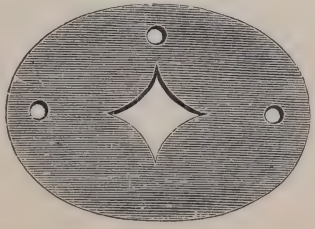
Small size Cross Bar.
4⅛ inches long x 3⅜ inches wide.

No. 420



3¾ inches diameter.

No. 421

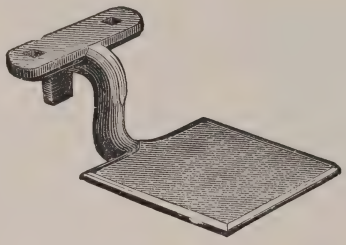


4½ inches long,
3½ inches wide,

MALLEABLE IRON.—CONTINUED.

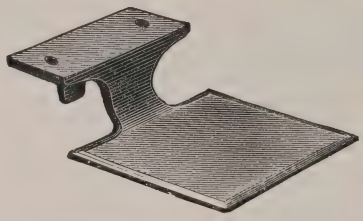
BODY STEPS.

No. 405



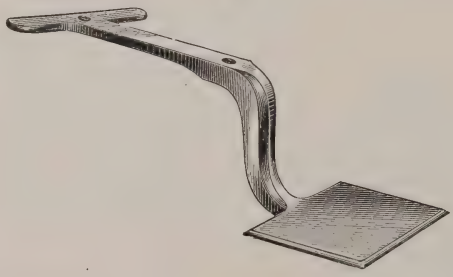
5¾ inches long,
3¼ inches wide.
Drops 2½ inches.

No. 406



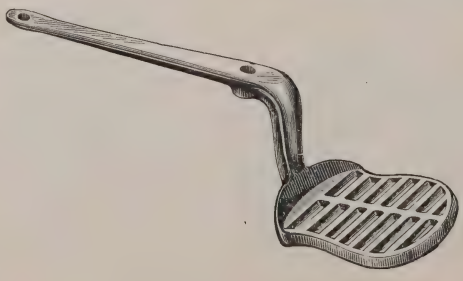
5¼ inches long,
3⅜ inches wide.
Drops 1½ inches.

No. 406½



Entire length
10⅜ inches.
Drops 2½ in.

No. 406¾

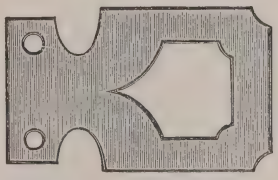


Entire length
12½ inches.
Drops 3 in.

MALLEABLE IRON.—CONTINUED.

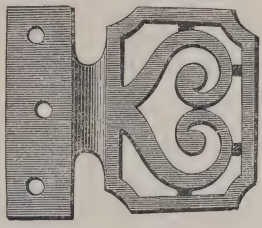
BODY STEPS.

No. 422



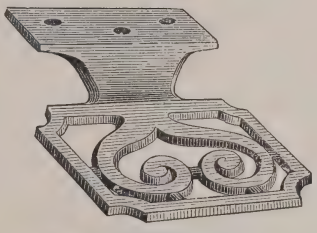
6⅞ inches long,
3⅞ inches wide.

No, 422½



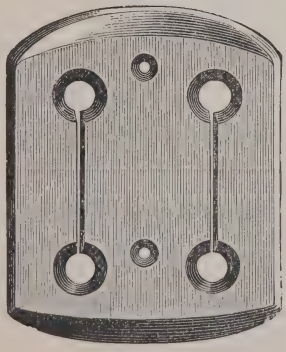
5½ inches long,
4 inches wide.

No. 422¾



Deep pattern.
Drops 1 inch.
5½ inches long x 4 inches wide.

No. 424



4 inches long,
3¼ inches wide.

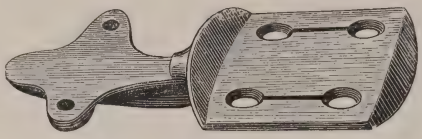
No. 424½ Same pattern.

4¾ inches long,
3¾ inches wide.

MALLEABLE IRON.—CONTINUED.

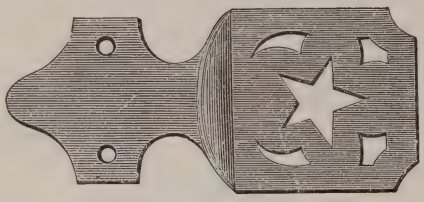
BODY STEPS.

No. 424¾



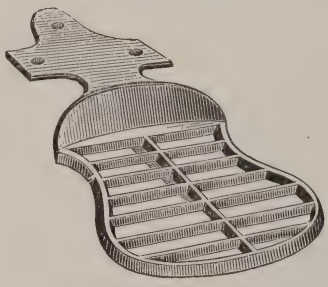
7¼ inches long,
3¼ inches wide.

No. 425



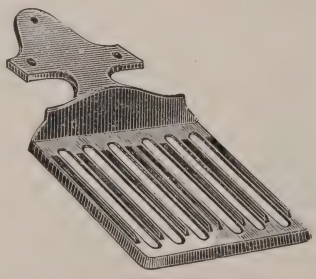
Star pattern.
8 inches long,
3¾ inches wide.

No. 425½



Cross Bar Pattern.
Drops 1 inch.
8½ inch. long, 4¼ inch. wide.

No. 425¾

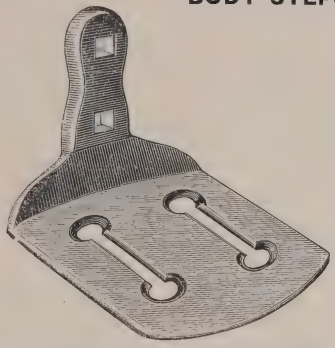


Drops 1 inch.
8¼ inches long,
4 inches wide.

MALLEABLE IRON.—CONTINUED.

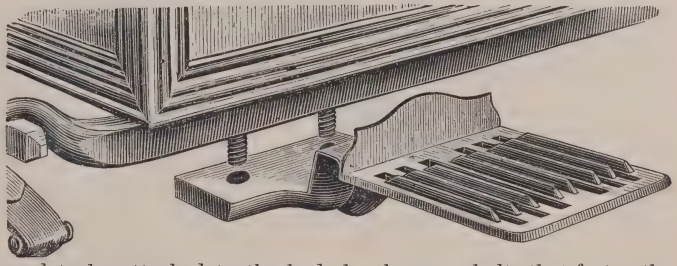
BODY STEPS.

No. 427¼



For Platform Wagons.
Size of Pad, 3 x 3¾.

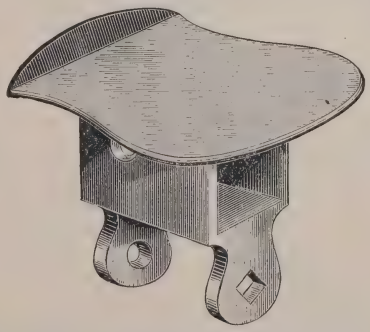
No. 427½



Designed to be attached to the body by the same bolts that fasten the body loops, as illustrated in the cut.
Entire length, 6 inches. Size of Pad, 3¾ x 3 inches.
Will fit any size of Body Loop.

DOTY'S PATENT PLATFORM WAGON STEP.

No. 427¾



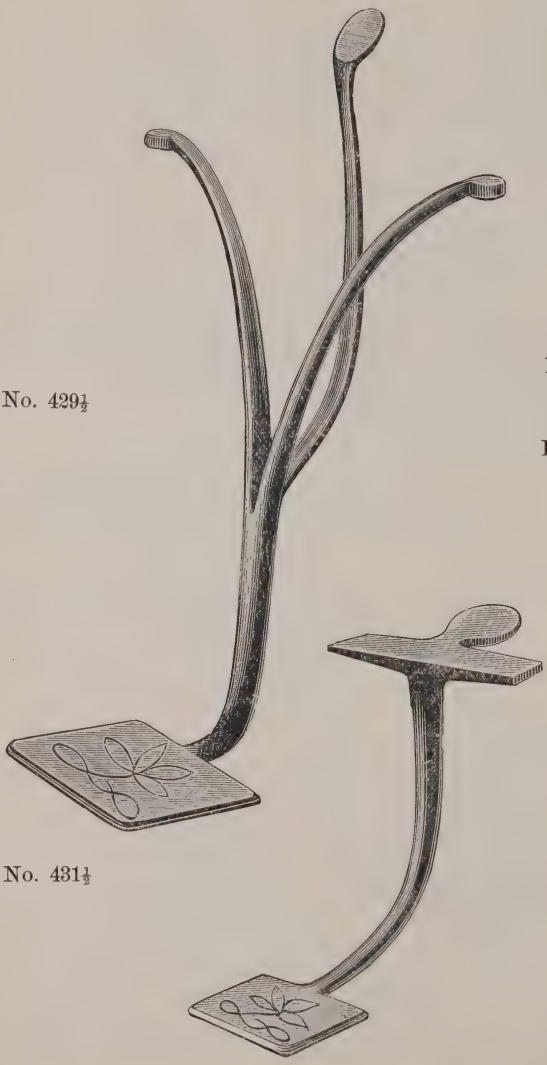
For 1¼, 1⅜ and 1½ inch Spring.

Patented August 8th, 1876.

The advantages of this valuable improvement are readily seen on inspection of the above cut, and wagon-makers will appreciate the great saving in expense secured by its use.

MALLEABLE IRON.—CONTINUED.

BODY STEPS.



No. 429½

For light work.
Piano Bodies.
Drops 13 inches.

No. 431½

For
Side Bar Buggies.
Drops 9 inches.

MALLEABLE IRON.—Continued.

WRENCHES.

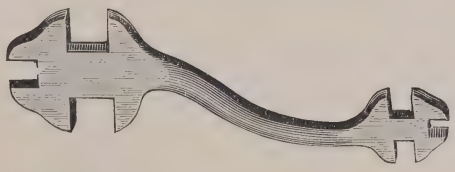
No. 450 3 Jaws.

$\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{5}{8}$, $1\frac{3}{4}$, 2 inches.

No. 451 3 Jaws

1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches.

FARMER'S S WRENCH.



No. 458	12 inches extreme length.	For $\frac{1}{2}$ to $1\frac{1}{4}$ nuts.
No. 459	$8\frac{1}{2}$ " " "	For $\frac{1}{2}$ to 1 nuts.

S WRENCH.

No. 461	5 inches long for $\frac{3}{8}$ and $\frac{1}{2}$ inch nuts.	
No. 462	7 " " " $\frac{1}{2}$ " $\frac{5}{8}$ " "	
No. 463	8 " " " $\frac{3}{4}$ " $\frac{7}{8}$ " "	

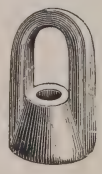
MALLEABLE IRON.—CONTINUED.

THUMB NUTS.

No. 518	Suitable for	$\frac{3}{16}$	inch	rod	after	threads	are	cut.	
No. 519	"	"	$\frac{7}{32}$	"	"	"	"	"	"
No. 520	"	"	$\frac{1}{4}$	"	"	"	"	"	"
No. 521	"	"	$\frac{5}{16}$	"	"	"	"	"	"
No. 522	"	"	$\frac{3}{8}$	"	"	"	"	"	"
No. 523	"	"	$\frac{1}{2}$	"	"	"	"	"	"

No. 524	Suitable for	$\frac{5}{16}$	inch	rod	after	threads	are	cut.	
No. 525	"	"	$\frac{3}{8}$	"	"	"	"	"	"
No. 526	"	"	$\frac{1}{2}$	"	"	"	"	"	"

LOOP HEAD NUTS.



No. 530 For $\frac{1}{4}$ inch rod.

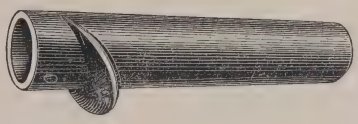
No. 531 Same pattern. For $\frac{5}{16}$ inch rod.

MALLEABLE IRON.—Continued.

POLE YOKES, TIPS AND HOLD BACKS.

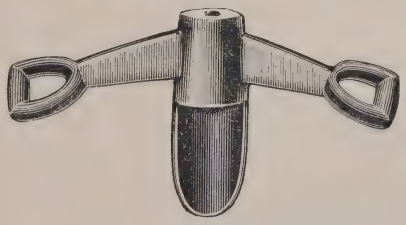
No. 561 $1\frac{1}{4}$ inches.

No. 565 $7\frac{7}{8}$ inches long, $1\frac{1}{4}$ inches diameter inside.



No. 566	6	in. long,	$1\frac{1}{8}$	in. hole.	No. $568\frac{1}{2}$	7	in. long, $1\frac{3}{4}$ in. hole.
No. 567	6	"	$1\frac{1}{4}$	"	No. $569\frac{1}{4}$	7	" $1\frac{1}{2}$ "
No. 568	6	"	$1\frac{3}{8}$	"	No. $569\frac{1}{2}$	7	" $1\frac{5}{8}$ "
No. 569	6	"	$1\frac{1}{2}$	"	No. $569\frac{3}{4}$	7	" $1\frac{3}{4}$ "
No. $567\frac{1}{2}$	7	"	$1\frac{1}{4}$	"			

No. 570 6 inches long.

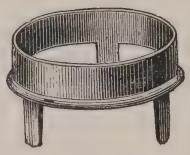
No, 551  10 inches long, $1\frac{1}{2}$ inches diameter.

NECK YOKE TIPS.

No. 580 $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$. Measure inside large end.

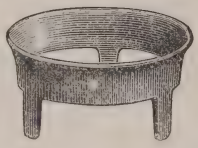
MALLEABLE IRON.—CONTINUED.

SAND BANDS.

No. 540½ 

For Farm Wagons.

To fit 3, 3¼, 3½, 3¾ Thimble Skeins.

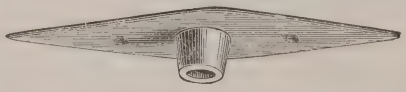
No. 543 

Bell pattern to drive.

1⅝, 2, 2⅛, 2¼, 2⅜, 2½, 2⅝, 2¾, 2⅞ and 3 inches.

Measure inside small end.

KING BOLT OR AXLE BED PLATE.

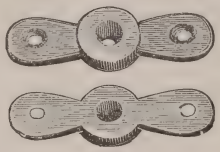
No. 545 

6½ inches long,
1¼ " wide,
½ inch hole.

No. 546 Same pattern.

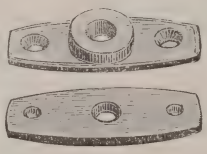
7½ inches long,
1⅜ " wide,
⅝ inch hole.

END OR TAIL BOARD PLATES AND NUTS.



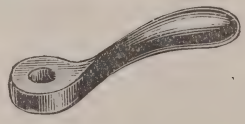
In pairs.

No. 600 For $\frac{5}{16}$ inch Rod.
No. 601 " $\frac{3}{8}$ " "

No. 602 

In pairs.

For $\frac{7}{16}$ inch Rod.

No. 605 

Hole to tap for $\frac{3}{8}$ inch Rod.

MALLEABLE IRON.—CONTINUED.

STAKE RINGS.

Measure taken inside.

No. 610 $\frac{5}{16}$ inch Wire for $\frac{7}{8}$ inch Stake, $1\frac{9}{16}$ inch Ring.
No. 611 $\frac{5}{16}$ " " " $\frac{7}{8}$ " " $1\frac{3}{4}$ " "
No. 612 $\frac{3}{8}$ " scant Wire for 1 inch Stake, $1\frac{5}{8}$ inch Ring.
No. 613 $\frac{3}{8}$ " " " " 1 " " 2 " "

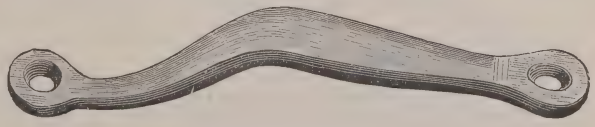
CIRCLE POSTS.

No. 618—For $\frac{5}{8}$ Square Iron, $\frac{7}{16}$ Shank, $3\frac{1}{4}$ from Shoulder to center of hole.

No. 619—Same pattern. $\frac{1}{2}$ Shank, $2\frac{1}{2}$ from Shoulder to center.

No. 616½—For $\frac{5}{8}$ Round Iron, $\frac{1}{2}$ Shank, $2\frac{1}{2}$ from Shoulder to center of hole.

WAGON HAMMER STRAP.



No. 620 8 inches long.
No. 621 $10\frac{1}{2}$ " "

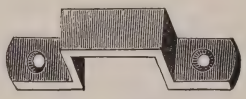
MALLEABLE IRON.—CONTINUED.

STAKE AND BOW IRONS.

No. 628½ For Wagon Bows. ⅞ inch deep, 1½ inches wide.

No. 629 Same pattern. For Wagon Bows. ⅞ inch deep, 1¼ inches wide.

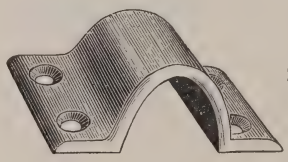
No. 629½ Same pattern. For Wagon Bows. ⅞ inch deep, 2 inches wide.

No. 630  Stake Iron. ⅞ inch deep, 1¼ inches wide.

No. 631 Same pattern. ⅞ inch deep, 1½ inches wide.

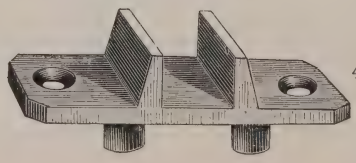
No. 633 Same pattern. ⅝ " " 1½ " "

No. 634 Same pattern. ⅝ " " 2 " "

No. 635  2½ inches deep for 1½ inch stake.

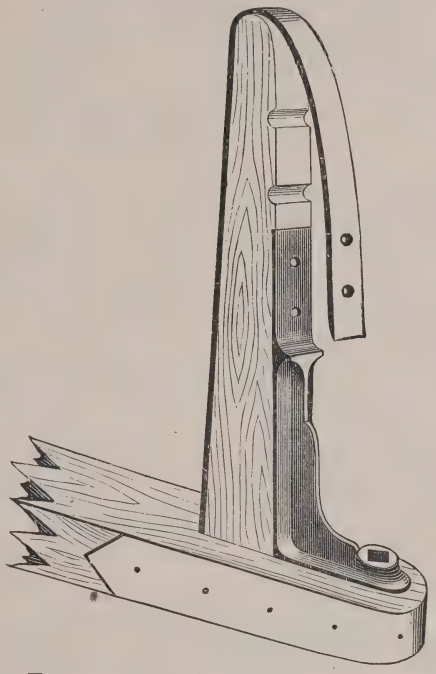
No. 636 Same pattern. 2¾ inch deep for 2 inch stake.

STAKE CLEAT FOR WAGON BOX.

No. 640  4 inch long for 1 inch stake.

MALLEABLE IRON.—CONTINUED.

WAGON STANDARD BRACE.

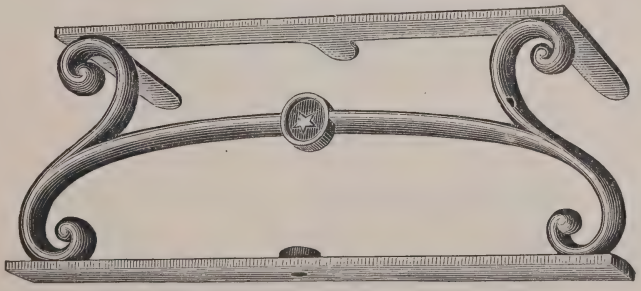


No. 638 — 1 inch wide, 6⅛ inches high.

No. 639 — ⅞ inch wide, 6⅛ inches high.

For use on two-horse wagons, as shown in cut.

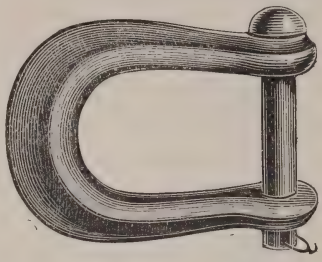
WAGON SEAT RISERS.



No. 780 6 inches high, 14 inches wide.
No. 781 7 " " 14 " "

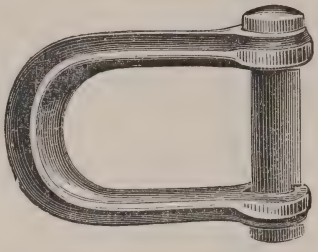
MALLEABLE IRON.—CONTINUED.

CLEVISES.



No. 689

Curved Ribbed pattern.
Round Pin.
2 inches inside measure.
4½ inches extreme length.

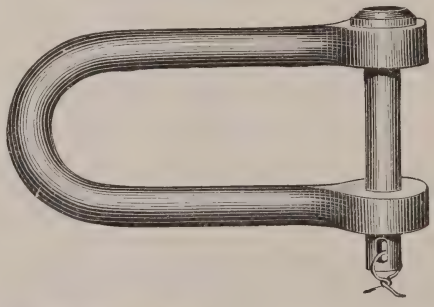


No. 693

Self fastening.
Ribbed pattern.
2 inches inside measure.
4⅝ inches extreme length.

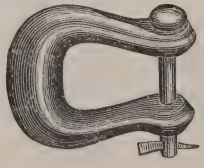
No. 694 Same pattern.

2¼ inches inside measure.
5½ inches extreme length.



No. 698

1⅞ inches inside measure.
6¼ inches extreme length.

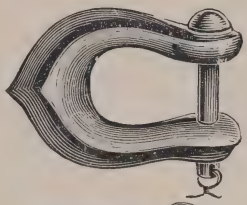


No. 700

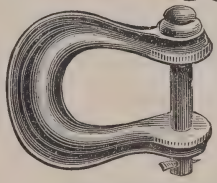
End Clevis.
⅝ inch inside measure.

MALLEABLE IRON.—Continued.

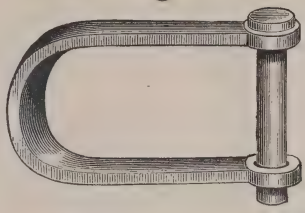
CLEVISES.



No. 701 — End Clevis. ⅝ inch inside measure. Used on Clevises Nos. 720, 721, 722 and 728.

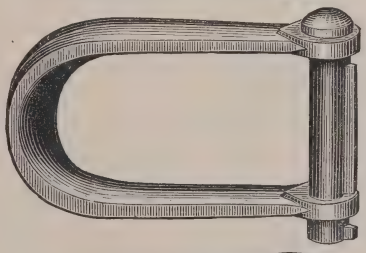


No. 701¼ — End Clevis. 1 inch inside measure. As used with Clevis No. 719.

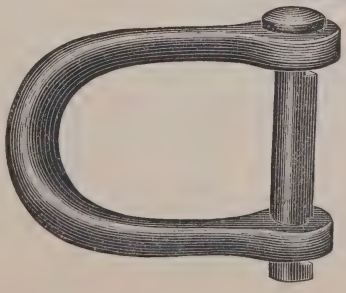


No. 703½ — 2 inches inside measure. 4½ inches extreme length.

No. 702¼ — 2 inches inside measure. 5⅝ inches extreme length.



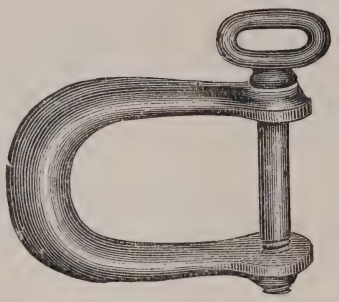
No. 703 — Self fastening. 2 inches inside measure. 4½ inches extreme length.



No. 704 — For Shovel Plows. 2⅞ inches inside measure. 5¼ inches extreme length.

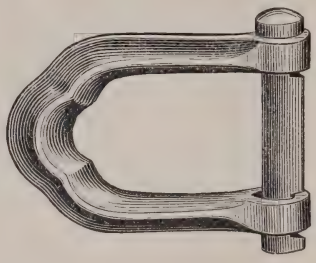
MALLEABLE IRON.—CONTINUED.

CLEVISES.



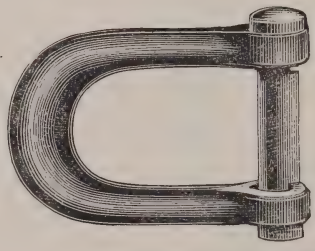
No. 704½ — Screw Pin. 2 inches inside measure. 4½ inches extreme length.

No. 704¾ — 2 inches inside measure. 5¼ inches extreme length.

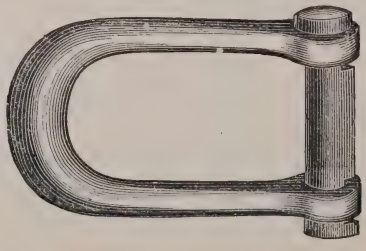


No. 705 — 2 inches inside measure. 4½ inches extreme length.

No. 705¼ — 2 inches inside measure. 5¼ inches extreme length.



No. 706 — 2 inches inside measure. 4½ inches extreme length.

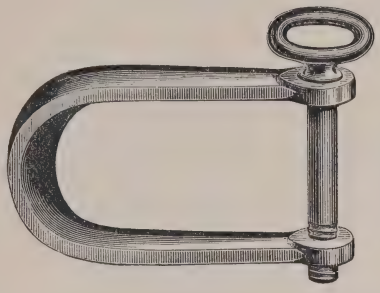


No. 708 — 1⅞ in. inside measure. 5¼ in. extreme length.

No. 709 — 2 in. inside measure. 5¼ in. extreme length.

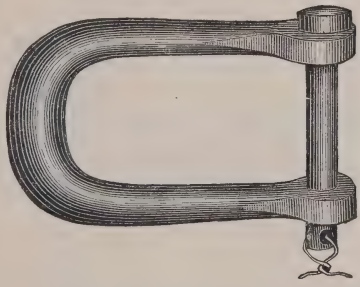
MALLEABLE IRON.—Continued.

CLEVISES.

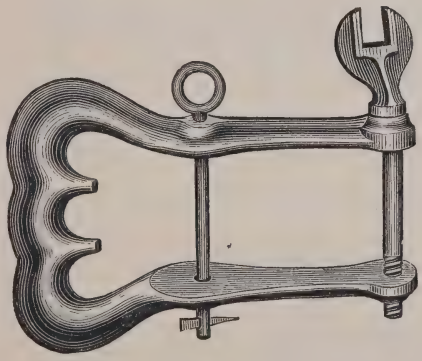


No. 702½ — Screw pin. 2 inches inside measure. 4½ " extreme length.

No. 703¼ — Same pattern. Screw pin. 2 inches inside measure. 6 inches extreme length.



No. 709½ — Same style as No. 709, but with Round Pin. 2 inches inside measure. 5¼ " extreme length.



No. 710 — For 2⅛ inch beam, with thread cut on wrench pin.

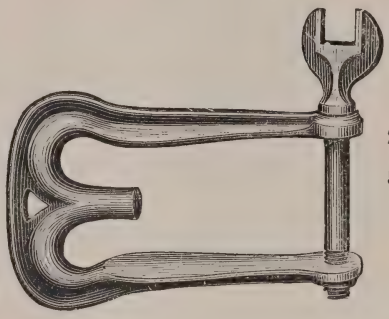
No. 711 — Same pattern. with thread cut on wrench pin. For 2¼ inch beam,

No. 712 — Same pattern. with thread cut on wrench pin. For 2½ inch beam,

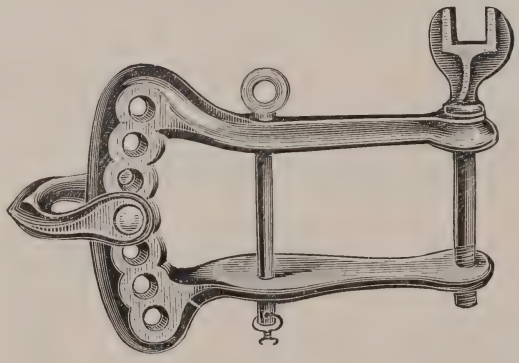
MALLEABLE IRON.—CONTINUED.

CLEVISES.

No. 716



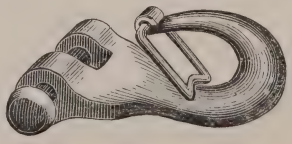
2 inches inside measure.
5⅞ inches extreme length.



No. 720 For 2½ inch beam, with thread cut on wrench pin.
No. 721 " 2⅝ " " " " " " " "
No. 722 " 3 " " " " " " " "

PLOW HOOK.

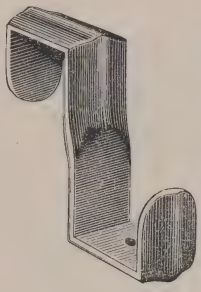
No. 751



5 inches long.
Heavy.

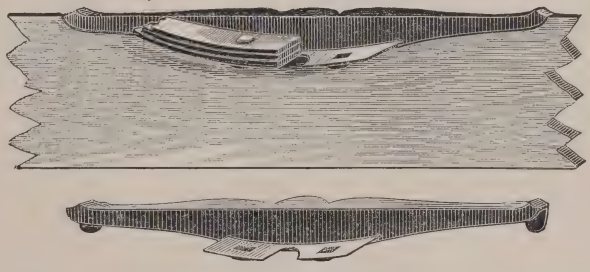
MALLEABEE IRON.—Continued.

WAGON BOX SPRING IRONS.



No. 775 — 3½ inches long. 1⅛ inch and 1⅜ inch Hook inside.

No 776 — Same pattern — 4 inches long. same inside measure.



No. 777

Seat Hook and Spring Supporter comblned; doing away with the ordinary wood for carrying spring.

Length, 15 inches. Hooks, 1 inch inside.

WAGON BRAKE HOLDER.

No. 623

14 inches long.

SILVER PLATED NAME PLATES.

No. 1

No. 2

No. 3

Cut Exact Size of Plates.

PRICES.

For first dozen ordered..... $2 25

After First Order.

1 or 2 dozen in one order.....per dozen, $1 25
5 dozen or over in one order..... " 1 00

In ordering give number of pattern you desire.

SILVER PLATING.

FOR CARRIAGE WORK.

PRICES.

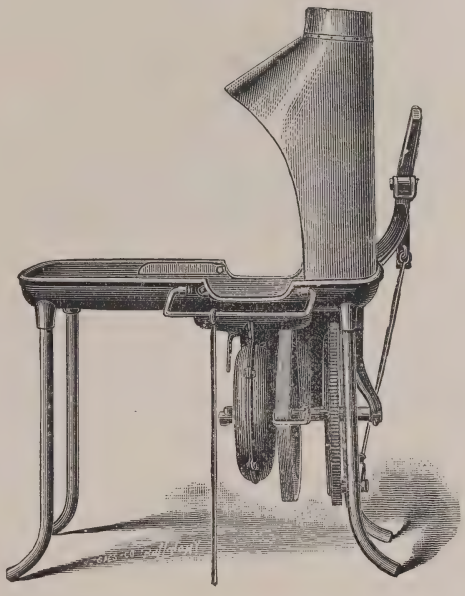
No. 2 Light. For Dashes, Rails, etc..... ..per inch, 4 cents
" 2 Fair. " " ..... " 4½ "
" 2 Stout. " " ..... " 5 "

We are prepared to do any kind of Close Plating, and price will be made on special sizes on application giving description.

We have our own men, and work will be done right and orders promptly attended to.

BUFFALO BLACKSMITH'S FORGE.

No. 0.



Price.....$50 00

This Forge has been brought out since our price list of Forges and Blowers was printed; but being exactly what has been wanted for years, we put it in later.

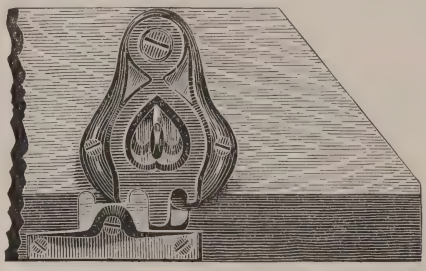
Heighth, 30 inches. Size of Hearth, 28x40. Fan, 12 inches.
Weight, 250 pounds.

Forge No. 0 is especially adapted for heavy Blacksmith work, having a large fire-place with sufficient blast to do the heaviest kind of work. Will heat 3½ or 4 inch round iron in 10 minutes.

It is a general favorite among Carriage and Wagon Blacksmiths. It economizes space and time, and is much more convenient and effective than a brick forge and bellows.

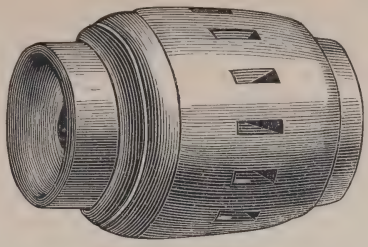
AUTOMATIC SEAT FASTENER.

WISELL'S PATENT.



Price per dozen sets..... $2 50

With each one dozen ordered will be packed three additional bottom catchers, enabling you to make front seat changeable.



DEPARTMENT

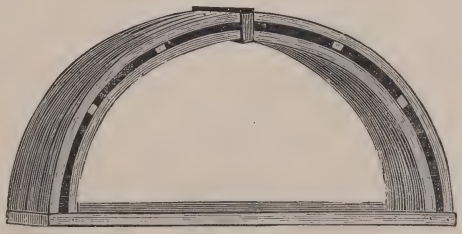
—OF—

Carriage and Wagon Wood Stock

—AND—

LUMBER.

OUR GREAT SPECIALTY.



CIRCULAR

WE CLAIM that our Wood Stock Department comprises a greater variety and more extensive stock than is carried by any house in THE WORLD! *This is no idle boast, and we invite a personal inspection to verify our assertion, and refer to the following catalogue as proof, for we advertise nothing we cannot supply, and can supply absolutely everything used in the manufacture of wagons and carriages.*

Being located in the midst of the finest timber country on earth; having an experience of fifteen years, and an acquaintance with all the saw mills and factories in the country, our advantages for selecting and purchasing stock are far superior to those of parties doing business from other points.

Our goods are all carefully inspected, repacked and regraded by an experienced workman at our store, and no worthless stock, or culls, will be shipped in any grade.

We desire to call particular attention to our second growth stock, which we make a specialty, and all of which we guarantee as fine as can be produced.

Black Hickory is a quality of timber very nearly approaching second growth, and we recommend it highly to our customers, as being suitable for fine work, but costing much less than genuine second growth.

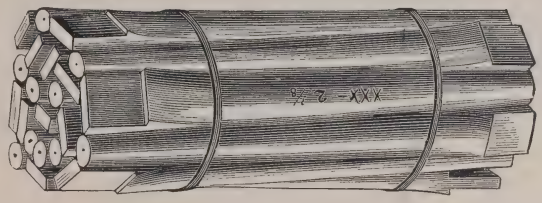
Our stock of Lumber will be kept up fully and we expect to be able to fill all orders for seasoned timber in any quantity. In arranging our Catalogue we have endeavored to convey, as nearly as possible, a correct idea of grades and quality, and all our goods will be fully up to standard as we understand it.

The prices attached must necessarily be subject to change, and we accordingly invite correspondence with reference to prices.

Very Respectfully,

COOMBS & CO.

WHITE OAK WAGON SPOKES.

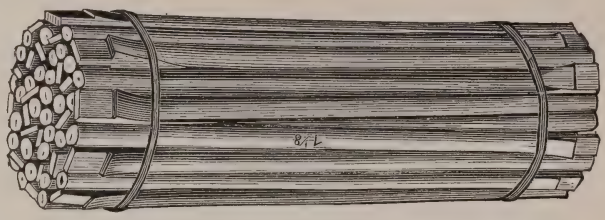


PRICES.

XX	Common,	2	to	$2\frac{1}{2}$	inch	Tenon.....	per set,	$1 50
XX	"	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	1 75
XX	"	$2\frac{7}{8}$	"	3	"	"	"	2 25
XXX	Standard,	2	"	$2\frac{1}{2}$	"	"	"	2 00
XXX	"	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	2 50
XXX	"	$2\frac{7}{8}$	"	3	"	"	"	3 00
XXX	Select,	2	"	$2\frac{1}{2}$	"	"	"	2 25
XXX	"	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	2 75
XXX	"	$2\frac{7}{8}$	"	3	"	"	"	3 25
XXX	Extra Select,	2	"	$2\frac{1}{2}$	"	"	"	2 75
XXX	"	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	3 25
XXX	"	$2\frac{7}{8}$	"	3	"	"	"	3 75
XXX	"	$3\frac{1}{8}$	"	$3\frac{1}{2}$	"	"	"	4 25
Royal Oak,		2	"	$2\frac{1}{2}$	"	"	"	3 25
"	"	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	3 75
"	"	$2\frac{7}{8}$	"	3	"	"	"	4 25
"	"	$3\frac{1}{8}$	"	$3\frac{1}{2}$	"	"	"	4 75
Second Growth, <C>		$1\frac{1}{2}$	"	$1\frac{7}{8}$	"	"	"	3 50
"	" "	2	"	$2\frac{1}{2}$	"	"	"	4 00
"	" "	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	4 50
"	" "	$2\frac{7}{8}$	"	3	"	"	"	5 00
"	" "	$3\frac{1}{8}$	"	$3\frac{1}{2}$	"	"	"	5 50
Second Growth, Ex. Select,		$1\frac{1}{2}$	"	$1\frac{7}{8}$	"	"	"	4 25
"	" "	2	"	$2\frac{3}{8}$	"	"	"	5 00
"	" "	$2\frac{1}{2}$			"	"	"	5 25
"	" "	$2\frac{5}{8}$	"	$2\frac{3}{4}$	"	"	"	6 00
"	" "	$2\frac{7}{8}$	"	3	"	"	"	6 50
"	" "	$3\frac{1}{8}$	"	$3\frac{1}{2}$	"	"	"	7 50

Special prices will be made for spokes longer than 28 inches. All wagon spokes are put up with 52 spokes in a set. Spokes made to any pattern and prices quoted on application.

HICKORY CARRIAGE SPOKES.



PRICES.

Selected Forest,	1	to 2	inch	Tenon	.....	per set,	$2 25
" " All Red,	1	" 1⅛	"	"	.....	"	2 50
Second Growth, <C>	1	" 1½	"	"	.....	"	3 25
" " "	1⅝	" 1¾	"	"	.....	"	3 75
Second Growth, Select,	1	" 1½	"	"	.....	"	4 00
" " "	1⅝	" 1¾	"	"	.....	"	4 50
Second Growth, Ex. Select,	1	" 1½	"	"	.....	"	5 00
" " "	1⅝	" 1¾	"	"	.....	"	5 50

Spokes under 1½ inch, 60 in a set. 1½ and larger, 52.

HICKORY SULKY SPOKES.

Selected Forest.....	per set,	$1 75
Second Growth, Select.....	"	3 00
" " Extra Select.....	"	3 50

Sulky Spokes have 36 to the set.

BENT BACK BARS.

Second Growth Ash.

In Rough.

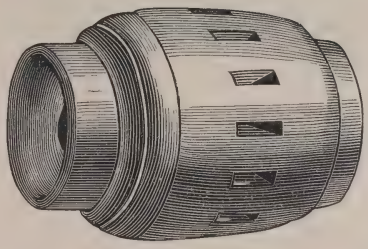
Finished.

PRICES.

Rough,	1	inch	thick,	5	inch	wide,	4	feet	long.....	per doz,	$11 00
"	1¼	"	"	5½	"	"	4	ft.	2 in. long..	"	12 50
"	1½	"	"	6	"	"	4	"	6 " "	"	14 00
Finished,	1	"	"	.....						each,	3 00
"	1¼	"	"	.....						"	3 50
"	1½	"	"	.....						"	4 00

In ordering Finished Bars give distance from outside to outside of springs, and width outside to outside of Body Loops.

OAK WAGON HUBS.



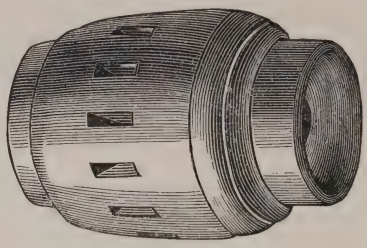
CUPPED OR PLAIN.

7	by	9,	Mortise	1⅝	by	⅝,	per set,	$1	50
7½	"	9,	"	1⅞	"	⅝,	"	1	50
8	"	9,	"	2	"	⅝,	"	1	50
8	"	10,	"	2	"	⅝,	"	1	50
8½	"	10,	"	2⅛	"	13–16,	"	1	50
8½	"	11,	"	2⅛	"	13–16,	"	1	50
8½	"	11,	"	2¼	"	13–16,	"	1	50
8½	"	12,	"	2¼	"	13–16,	"	1	50
9	"	11,	"	2¼	"	13–16,	"	1	50
9	"	12,	"	2¼	"	13–16,	"	1	50
9½	"	12,	"	2⅜	"	13–16,	"	1	75
10	"	12,	"	2⅜	"	13–16,	"	1	75
10½	"	13,	"	2½	"	15–16,	"	2	50
11	"	14,	"	2⅝	"	1 inch,	"	3	50
12	"	14,	"	2½	"	1 inch,	"	4	00

LOCUST WAGON HUBS.

8	by	10 inch,	Cupped or Plain,			per set,	$2	75
8½	"	11	"	"	"	"	3	00
9	"	12	"	"	"	"	3	25
9½	"	12	"	"	"	"	3	75
10	"	12	"	"	"	"	4	25

BLACK BIRCH WAGON HUBS.

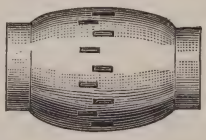


CUPPED OR PLAIN.

7	by	9,	Mortise	1⅝	by	⅝,	.....	per set,	$1	75
7½	"	9,	"	1⅞	"	⅝,	.....	"	1	75
8	"	9,	"	2	"	⅝,	.....	"	1	85
8	"	10,	"	2	"	⅝,	.....	"	1	85
8½	"	10,	"	2⅛	',	13–16,	.....	"	2	00
8½	"	11,	"	2⅛	"	13–16,	.....	"	2	00
8½	"	11,	"	2¼	"	13–16,	.....	"	2	00
8½	"	12,	"	2¼	"	13–16,	.....	"	2	00
9	"	11,	"	2¼	"	13–16,	.....	"	2	00
9	"	12,	"	2¼	"	13–16,	.....	"	2	00
9½	"	12,	"	2⅜	"	13–16,	.....	"	2	25
10	"	12,	"	2⅜	"	13–16,	.....	"	2	50
10½	"	13,	"	2½	"	15–16,	.....	"	2	75
11	"	14,	"	2⅝	"	1 inch,	.....	"	3	50
12	"	14,	"	2¾	"	1 inch,	.....	"	4	00

Birch hubs have been used by some of our best manufacturers for the past five years, and been found greatly superior to Oak. Having been unable to supply the demand, we have never before offered them to our regular trade. We now have a large stock of seasoned hubs on hand, and have made arrangements to carry them regularly in stock in future. They are particularly valuable for use in Rocky Mountain districts and on the Pacific coast.

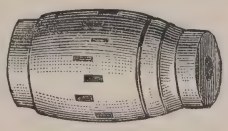
SULKY HUBS.



FULL DODGED MORTISE.

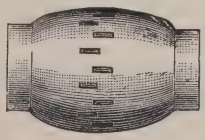
3¼	by	6½,	and	3½	by	6½,	Mortise	¾	by	⅜,	..... per set, $ 75
3⅝	"	6½,	"	4	"	6½,	"	⅞	"	⅜,	..... " 75
4¼	"	6½,	"	4¼	"	7,	"	⅞	"	⅜,	..... " 75
4⅝	"	7,	"	4½	"	6½,	"	1	"	⅜,	..... " 75
5	"	7,						1⅛	"	½,	..... " 75

SELECTED BUGGY HUBS.



3½	by	6½,	and	3⅝	by	6½,	Mortise	⅝	by	⅝,	per set,	$	75
4	"	6½,	"	4	"	7,	"	⅞	"	⅝,	"		80
4¼	"	6½,	"	4¼	"	7,	"	⅞	"	⅝,	"		80
4½	"	6½,	"	4½	"	7,	"	1	"	⅝,	"		80
4⅝	"	6½,	"	4⅝	"	7,	"	1	"	⅝,	"		90
5	"	7,	"	5¼	"	7,	"	1⅛	"	½,	"	1	00
5½	"	7,	"	5½	"	7½,	"	1¼	"	½,	"	1	10
5⅝	"	7,	"	5⅝	"	7½,	"	1¼	"	½,	"	1	20
6	"	7½,	"	6	"	8,	"	1⅜	"	⅝,	"	1	25
6½	"	8,	"	6½	"	8½,	"	1⅜	"	⅝,	"	1	30
7	"	8,	"	7	"	9,	"	1½	"	⅝,	"	1	40

SECOND GROWTH BUGGY HUBS.



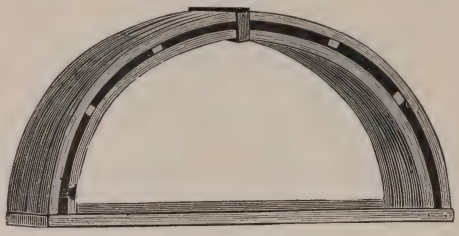
EXTRA FINE QUALITY.

3½	by	6½,	and	3⅝	by	6½,	Mortise	⅝	by	⅝,	per set,	$1	50
4	"	6½,	"	4	"	7,	"	⅞	"	⅝,	"	1	50
4¼	"	6½,	"	4¼	"	7,	"	⅞	"	⅝,	"	1	75
4½	"	6½,	"	4½	"	7,	"	1	"	⅝,	"	1	75
4⅝	"	6½,	"	4⅝	"	7,	"	1	"	⅝,	"	1	75
5	"	7,	"	5¼	"	7,	"	1⅛	"	½,	"	2	00
5½	"	7,	"	5½	"	7½,	"	1¼	"	½,	"	2	00
5⅝	"	7,	"	5⅝	"	7½,	"	1¼	"	½,	"	2	00
6	"	8,	"					1⅜	"	⅝,	"	2	25
6½	"	8,	"					1½	"	⅝,	"	2	25

FULL DODGED MORTISE.

3½	by	6½,	and	3⅝	by	6½,	Mortise	⅝	by	⅝,	per set,	$1	50
4	"	6½,	"	4	"	7,	"	⅞	"	⅝,	"	1	50
4¼	"	6½,	"	4¼	"	7,	"	⅞	"	⅝,	"	1	50
4½	"	6½,	"	4½	"	7,	"	1	"	⅝,	"	1	50

BENT RIMS.



SELECTED QUALITY OR—X.

1	inch	Square,	Hickory	per set,	$1	00
1⅛	"	"	"	"	1	00
1¼	"	"	"	"	1	10
1⅜	"	"	"	"	1	20
1½	"	"	"	"	1	35
1⅝	"	"	White Oak	"	1	45
1¾	"	"	"	"	1	60
1¾	by 2	in. deep,	"	"	2	25
2	" 2	"	"	"	2	50
1¾	" 2¼	"	"	"	2	50
1⅞	" 2¼	"	"	"	2	50
2	" 2¼	"	"	"	2	75
2	" 2½	"	"	"	3	00

EXTRA SELECTED OR—XX.

1	and 1⅛	inch, Square,	Hickory	per set,	$1	60
1¼		"	"	"	1	80
1⅜		"	"	"	2	00
1½		"	"	"	2	25
1⅝		"	White Oak	"	2	25
1¾		"	"	"	2	50
1¾	by 2	" deep,	"	"	3	25
1¾	" 2¼	"	"	"	3	50
2	" 2¼	"	"	"	4	00

BENT RIMS.

SECOND GROWTH HICKORY OR—XXX.

1 and 1⅛ inch	per set,	$4 25
1¼ "	"	4 50
1⅜ "	"	4 80
1½ "	"	5 25

SULKY RIMS.

Selected Hickory, 1 and 1⅛ inch	per set,	$ 90
" " 1¼ "	"	1 00
" " 1⅜ "	"	1 10
Second Growth Hickory, 1⅛ "	"	2 50
" " " 1¼ "	"	2 75
" " " 1⅜ "	"	3 00

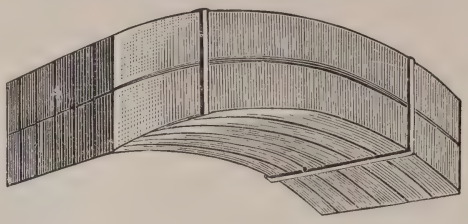
BENT TRUCK RIMS.

2½ inch tread, 3 feet 2 inch and 3 feet 6 inch wheel	per set,	$2 75
3 " " 3 " 2 " " 3 " 6 " "	"	3 25
3½ " " 3 " 2 " " 3 " 6 " "	"	3 75
4 " " 3 " 2 " " 3 " 6 " "	"	4 25

BROAD TREAD WAGON RIMS.

2½ inch tread, 3 feet 6 inch and 4 feet wheel	per set,	$3 00
3 " " 3 " 6 " " 4 " "	"	3 50
3½ " " 3 " 6 " " 4 " "	"	4 00
4 " " 3 " 6 " " 4 " "	"	4 50
2½ " " 3 " 8 " " 4 " 6 inch wheel	"	3 00
3 " " 3 " 8 " " 4 " 6 " "	"	3 50
3½ " " 3 " 8 " " 4 " 6 " "	"	4 00
4 " " 3 " 8 " " 4 " 6 " "	"	4 50

SAWED WAGON FELLOES.



													Price per set, Green.	*Dry.*
1⅝	inch	by	2¼	inch	deep,	3	feet	8	and	4	feet	6	wheel....	$1 00	$1 25
1⅞	"	"	2⅜	"	"	3	"	8	"	4	"	6	"	....	1 00	1 25
2	"	"	2½	"	"	3	"	8	"	4	"	6	"	....	1 00	1 25
2	"	"	2⅝	"	"	3	"	8	"	4	"	6	"	....	1 25	1 50
2	"	"	2⅞	"	"	3	"	8	"	4	"	6	"	....	1 50	1 75
2¼	"	"	3	"	"	3	"	8	"	4	"	6	"	....	2 00	2 50
2⅜	"	"	3	"	"	3	"	8	"	4	"	6	"	....	3 00	3 50
3	"	"	3½	"	"	3	"	8	"	4	"	6	"	....	3 50	4 00

Any sizes other than above will be cut to order out of Dry or Green plank, and actual additional cost charged.

Our Felloes are all carefully selected and seasoned under sheds, and every piece shipped will work.

SAWED TRUCK FELLOES.

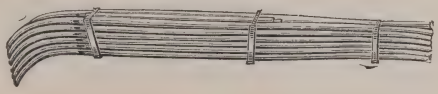
2	inch	tread,	2½	inch	deep,	3	feet	2	and	3	feet	6	wheel,	per set,	$2 00
2½	"	"	2½	"	"	3	"	2	"	3	"	6	"	"	2 50
3	"	"	2½	"	"	3	"	2	"	3	"	6	"	"	2 75
3½	"	"	2½	"	"	3	"	2	"	3	"	6	"	"	3 00
4	"	"	2½	"	"	3	"	2	"	3	"	6	"	"	3 25

BREWSTER BENT REACHES.

Second Growth Hickory.

⅞	by	⅞	inch,	5½	feet	long	.....	per doz.	pairs,	$ 8 00
1	"	1	"	5½	"	"	.....	"	"	8 00
1⅛	"	1⅛	"	5½	"	"	.....	"	"	9 00

SHAFTS.



STRAIGHT HEEL.—Unfinished.

Price Per Dozen Pairs.

Size	XX	XXX	C
1½ by 2 inches	$ 5 00	$ 7 00	$ 9 00
1⅝ " 2¼ "	7 50	10 00	12 00
2 " 2½ "	10 00	12 00	14 00

BENT HEEL.—Unfinished.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1⅜ by 2 inches	$ 5 00	$ 7 50	$ 9 50	$12 00	$17 00
1½ " 2 "	5 50	8 00	10 00	12 00	17 00
1⅝ " 2¼ "	7 50	10 00	12 00	15 00	.....
1⅝ " 2¼ "	8 50	10 50	13 00	16 00	.....
2 " 2½ "	10 50	13 00	16 00	18 00	.....

Cutter Shafts same list price as Bent Heel Buggy.

ADAMS EXPRESS SHAFTS.—Unfinished.

Size	XXX	C	Second Growth
1⅝ by 2½ inches	$24 00	$30 00	$45 00
2 " 2½ "	30 00	36 00	.....

COUPE SHAFTS.—Unfinished.

Size	C	Second Growth
1½ by 2½ inches	$26 00	$36 00

SULKY SHAFTS.—Unfinished.

Circle Back Hickory, XXX.....per pair, $ 1 50
Trotting, Selected Ash..... " 2 00
" Second Growth Ash..... " 3 00

SHAFTS.

BENT HEEL.—FINISHED.

With Cross Bars.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1⅜ by 2 inches	$ 9 00	$11 50	$13 00	$15 00	$21 00
1½ " 2 "	9 50	12 00	13 50	15 00	21 00
1¾ " 2¼ "	12 00	15 00	16 50	.....	.....
2 " 2½ "	14 00	17 00	18 50	.....	.....

BENT HEEL.—HALF FINISHED.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1⅜ by 2 inches	$ 7 50	$10 00	$11 50	$13 50	$19 50
1½ " 2 "	8 00	10 50	12 00	13 50	19 50
1¾ " 2¼ "	11 00	14 00	15 50	.....	.....
2 " 2½ "	13 00	16 00	17 50	.....	.....

PLATFORM WAGON.—FINISHED.

With Straight Cross Bars.

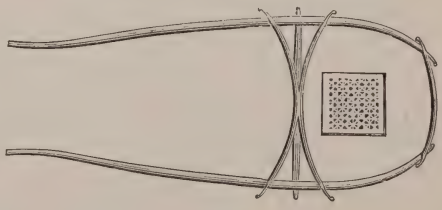
Size	XX	XXX	C
1½ by 2 inches	$ 8 00	$10 00	$12 00
1¾ " 2¼ "	11 00	14 00	16 00
2 " 2½ "	14 00	16 00	18 50

Platform Shafts, with bent cross bars, $2 00 per dozen pairs net extra.

CUTTER SHAFTS.—FINISHED.

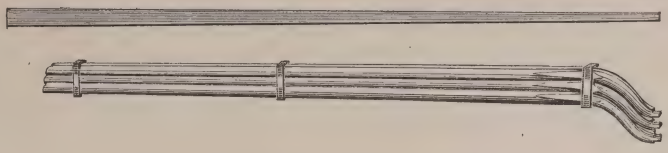
	XX	XXX	C
With one Cross Bar	$ 9 00	$12 00	$14 00
" two " "	11 00	14 00	16 00

SULKY SHAFTS.—FINISHED.



Circle Back Hickory.....per set, $ 5 00
Half Circle or Trotting..... " 5 00
Trotting, extra quality Second Growth Ash, finished with
Cross Bar, Whiffletrees and Seat, (like cut)..... " 12 50

POLES.



PLATFORM WAGON.—UNFINISHED.

Size	XX	XXX	C
2 by 2½ inches	$ 5 00	$ 7 00	$ 8 25
2 " 2¾ "	6 00	8 00	10 50
2 " 3 "	7 00	9 50	12 00
2½ " 3½ "	11 00	13 50	15 00

PLATFORM WAGON.—FINISHED.

With Straight or Bent Cross Bars.

Size	XX	XXX	C
2 by 2½ inches	$ 8 00	$10 50	$13 00
2 " 2¾ "	9 00	11 50	14 00
2 " 3 "	10 00	12 50	15 00

SINGLE BEND.—UNFINISHED.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1¾ by 2¼ inches	$ 5 50	$ 8 00	$10 00	$15 00	$19 00
2 " 2½ "	5 50	8 00	10 00	15 00	19 00
2 " 2¾ "	7 50	10 00	12 00	18 00	22 00
2 " 3 "	9 00	11 50	14 00	19 00	23 00
2¼ " 3 "	12 00	15 00	16 50	.....	.....

SINGLE BEND.—FINISHED.

With Cross Bars.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1¾ by 2¼ inches	$ 9 00	$11 50	$14 00	$19 50	$25 00
2 " 2½ "	9 00	11 50	14 00	19 50	25 00
2 " 2¾ "	11 00	14 00	16 00	.....	.....
2 " 3 "	13 00	16 00	18 00	.....	.....
2¼ " 3 "	16 00	18 00	21 00	.....	.....

POLES.

DOUBLE BEND.—UNFINISHED.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1¾ by 2¼ inches	$ 7 00	$ 9 00	$12 00	$14 50	$19 00
2 " 2½ "	7 00	9 00	12 00	14 50	19 00
2 " 2¾ "	9 00	12 00	14 00	16 00	21 00
2 " 3 "	11 00	13 50	16 00	17 50	.....
2¼ " 3 "	15 00	18 00	20 00	.....	.....

DOUBLE BEND.—FINISHED.

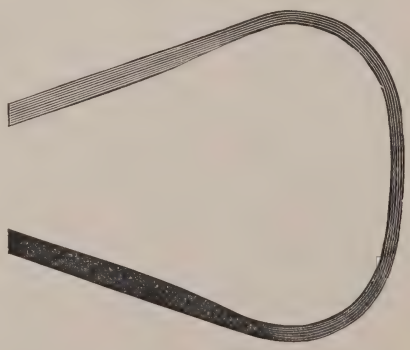
With Bent Cross Bars.

Size	XX	XXX	C	2d Growth	Ex. Quality 2d Growth
1¾ by 2¼ inches	$11 50	$14 00	$16 00	$19 00	$25 00
2 " 2½ "	11 50	14 00	16 00	19 00	25 00
2 " 2¾ "	13 50	16 00	18 00	.....	.....
2 " 3 "	15 50	18 00	20 00	.....	.....
2¼ " 3 "	17 50	20 00	22 00	.....	.....

POLE CIRCLES.

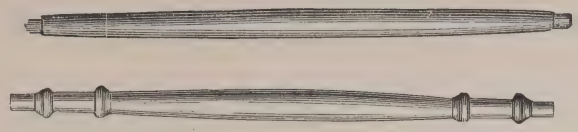
Selected Hickory, XX .....per dozen, $1 00
Extra Select, XXX ..... " 2 00
Finished, XX ..... " 2 50

BENT WAGON HOUNDS.



Wide or Narrow Track.....each, 65 cents
" " " Rounded..... " 75 "

WAGON NECK YOKES.



BEADED PATTERN.

No.	1	Hickory,	2⅜ to 2½	in.	center,	36	in.	long,	per doz.,	$1 25
"	2	"	2⅜ " 2½	"	"	38	"	"	"	1 25
"	3	"	2⅜ " 2½	"	"	40	"	"	"	1 50
"	4	"	2⅜ " 2½	"	"	42	"	"	"	1 50
"	5	"	2⅝ " 2¾	"	"	40	"	"	"	2 00
"	6	"	2⅝ " 2¾	"	"	42	"	"	"	2 00
"	7	"	2¾	"	"	48	"	"	"	3 00
"	8	"	3	"	"	48	"	"	"	3 50
"	9	Ash,	2⅜ " 2½	"	"	36	"	"	"	1 25
"	10	"	2⅜ " 2½	"	"	38	"	"	"	1 25
"	11	2d Gro. Hickory,	2⅜ " 2½	"	"	36	"	"	"	4 00
"	12	" " "	2⅜ " 2½	"	"	38	"	"	"	4 00
"	13	2d Growth Ash,	2⅝ " 2½	"	"	36	"	"	"	3 50
"	14	" " "	2⅜ " 2½	"	"	38	"	"	"	3 50

PLAIN PATTERN.

No.	15	Hickory,	2⅜ to 2½	inch	center,	36	inches	long,	per dozen,	$1 25
"	16	"	2⅜ " 2½	"	"	38	"	"	"	1 25
"	17	"	2⅝ " 2¾	"	"	40	"	"	"	2 00
"	18	"	2⅝ " 2¾	"	"	42	"	"	"	2 00

EXPRESS WAGON NECK YOKES.

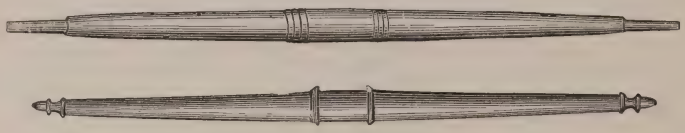
ACORN END.

No.	19	Selected Hickory,	1⅛	inch	center,	44	inches	long,	per dozen,	$2 00
"	20	2d Growth "	1⅛	"	"	44	"	"	"	4 00
"	21	" " Ash,	1⅛	"	"	44	"	"	"	3 50

PLAIN ROUND END.

No.	22	Selected Hickory,	1⅛	inch	center,	44	inches	long,	per dozen,	$2 00
"	23	2d Growth "	1⅛	"	"	44	"	"	"	4 00
"	24	" " Ash,	1⅛	"	"	44	"	"	"	3 50

BUGGY NECK YOKES.



ACORN END.

No. 25	Selected	Hickory,	1½	inch	center,	38	inches	long,	per dozen,	$2 00
" 26	"	"	1½	"	"	44	"	"	"	2 00
" 27	2d Growth	"	1½	"	"	38	"	"	"	4 00
" 28	"	"	1½	"	"	44	"	"	"	4 00
" 29	"	"	1½	"	"	48	"	"	"	4 00
" 30	"	"	1⅝	"	"	48	"	"	"	4 00
" 31	"	" Ash,	1½	"	"	44	"	"	"	3 50

FERRULE END.

No. 32	2d Gro.	Hickory,	1½	inch	center,	44	inches	long,	per dozen,	$4 00
33	"	"	1½	"	"	48	"	"	"	4 00

PLAIN ROUND END.

No. 34	Selected	Hickory,	1½	inch	center,	44	inches	long,	per dozen,	$2 00
" 35	2d Growth	"	1½	"	"	44	"	"	"	4 00
" 36	"	" Ash,	1½	"	"	44	"	"	"	3 50

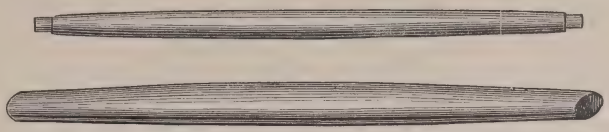
BUGGY SINGLETREES.

No. 37	Selected	Hickory,	1⅝	by	2,	34	inches	long,	per dozen,	$2 00
" 38	"	"	1⅝	"	2,	38	"	"	"	2 00
" 39	Second Growth	Hickory,	1⅝	"	1⅞,	38	"	"	"	2 50
" 40	"	"	1¼	"	1¾,	38	"	"	"	2 50
" 41	Ex. Qual. 2d Gro.	Hickory	1⅝	"	1⅞,	34	"	"	"	3 00
" 42	"	"	1⅝	"	1⅞,	38	"	"	"	3 00
" 43	"	"	1¼	"	1¾,	38	"	"	"	3 00
" 44	"	" Shaved	Cock	Eye,		40	"	"	"	4 00
" 45	"	"	"	"	"	44	"	"	"	4 00

EXPRESS WAGON SINGLETREES.

No. 46	Selected	Hickory,	1½	by	2⅛,	38	inches	long,	per dozen,	$2 00
" 47	Second Growth	Hickory,	1½	"	2⅛,	38	"	"	"	2 50
" 48	Ex. Qual. 2d G'th	Hic'ry,	1½	"	2⅛,	38	"	"	"	3 00

WAGON SINGLETREES.



OVAL.

No. 49	Selected Hickory, Light	per dozen,	$1 25
" 50	" " Heavy	"	1 25
" 51	" " Extra Heavy	"	2 00
" 52	" " Plow Singletrees	"	1 00
" 53	Second Growth Hickory, Wagon	"	3 50

ROUND.

No. 54	Selected Hickory, Light	per dozen,	$1 25
" 55	" " Heavy	"	1 25
" 56	" " Extra Heavy	"	2 00
" 57	Second Growth Hickory	"	3 50
" 58	" " Ash	"	3 50

EVENERS OR DOUBLETREES.

WAGON.

No. 59	Narrow Track, Hickory	per dozen,	$2 50
" 60	" " " Extra Heavy	"	3 50
" 61	Wide Track, "	"	2 50
" 62	" " " Extra Heavy	"	3 50

BUGGY.

No. 63	Selected Hickory	per dozen,	$2 50
" 64	Second Growth Hickory, Extra Quality	"	5 00

EXPRESS.

No. 65	Selected Hickory	per dozen,	$2 50
" 66	Second Growth Hickory	"	5 00

BUGGY GEARING.

SELECTED HICKORY.—FINISHED.

Plain Parts. Six pieces to set	per set,	$2 00
Two Pieces, Carved. Six pieces to set	"	2 75
Full Carved. Six pieces to set	"	4 00
Democrat Wagon, 3 spring. 1¼ and 1⅜ axle	"	2 75
" " 3 " 1½ "	"	3 00
Phaeton, 3 " without Back Bar	"	3 00
" 3 " with " "	"	3 75

BUGGY PARTS.

SELECTED HICKORY.—UNFINISHED.

Reaches, 1¼ inch square, 5½ feet long	each,	$ 05
Spring Bars, 1½ by 2 inches, 3 feet long	"	04
Head Blocks, 1½ " 2 " 2 " "	"	03
Axle Beds, 1½ " 4 to 5 inches wide, 4½ feet long	"	15
Cross Bars for Shafts, 1½ by 2 inches, 4 feet long	"	05
Doubletrees, 1½ by 2½ inches, 52 inches long	"	07
" 1½ " 3 " 52 " "	"	08
Whiffletrees, 1½ " 2 " 40 " "	"	04
Ash Lazy Backs, 1 by 4½ inches, 3 feet long	"	5½
" Seat Risers, 1 " 6 " 21 inches long	"	05

SECOND GROWTH HICKORY.—UNFINISHED.

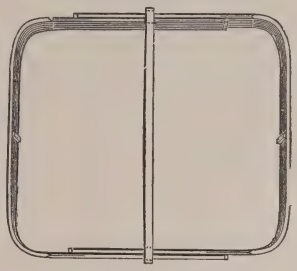
Reaches, 1¼ inch square, 5½ feet long	each,	$ 20
Spring Bars, 1½ by 2 inches, 3 feet long	"	18
Head Blocks, 1½ " 2 " 2 " "	"	14
Axle Beds, 1½ " 4 to 5 inches wide, 4½ feet long	"	65
Cross Bars for Shafts, 1½ by 2 inches, 4 " "	"	25

HICKORY SIDE BARS.—UNFINISHED.

Selected Hickory, Extra Quality, one seat	per pair,	$ 80
" " " " two "	"	1 00
Second Growth Hickory, one "	"	1 25
" " " two "	"	1 50

CARRIAGE BOWS.

Four Bows to a Set.



Four Sets in a Bundle.

Selected Ash	per set,	$ 65
Second Growth Ash	"	90
" " " for Tubular Bow Sockets	"	70

EXPRESS OR GROCERY BOWS.

Selected Ash,	4 Bows 1⅜ by ⅞ inch	per set,	$1	00
" "	5 " 1⅜ " ⅞ "	"	1	25
Second Growth Ash,	4 " 1⅜ " ⅞ "	"	1	40
" " "	5 " 1⅜ " ⅞ "	"	1	75

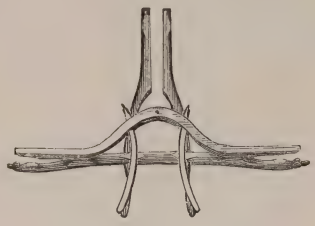
WAGON BOWS.

Five Bows to a Set.

Round Top, Square Edge	2 by ⅝ inch	per set,	$ 80
" " Rounded	" 2 " ⅝ "	"	90
Square Top, Square	" 2 " ⅝ "	"	80
" " Rounded	" 2 " ⅝ "	"	90
Round Top, Square	" 2½ " ⅝ "	"	1 40
" " "	" 3 " ⅝ "	"	1 65
" " "	" 2 " ¾ "	"	1 40
" " "	" 2½ " ¾ "	"	1 75
" " "	" 3 " ¾ "	"	2 00
Bow Slats, 2 by ⅝ inch, 12 feet long		each,	13

Bows of any desired size made to order and prices furnished when asked for.

PLATFORM CARRIAGE PARTS.



No. 1

No. 2

Finished.

No. 1. For Stiff Pole.....each, $10 50
If a draw bar is furnished, additional..... " 1 00

In ordering give the width outside of body at forward end above the *C* part, the distance outside to outside of springs on forward axle, and what kind of Carriage.

No. 2. Open bent Futchel Coach part for Drop Pole or Shafts, each, $11 00

OPEN BENT FUTCHELS.

Unfinished.

Ash, 1¼ inches thick.....per dozen pairs, $ 9 50
" 1⅜ " " ..... " " 11 00
" 1½ " " ..... " " 12 50
" 1⅝ " " ..... " " 14 00

BENT REACHES.—UNFINISHED.

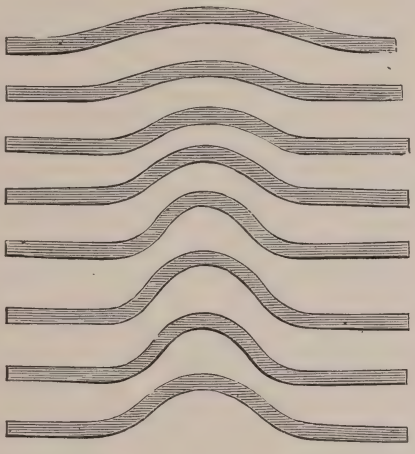
Second Growth Hickory.

For Drop Front Phaetons, ⅞ to 1⅛ inch thick.....per dozen, $ 4 00
" Cabriolets, 1¼ " " ..... " 10 50

TURNED SEAT SPINDLES.

Hickory, ¼ and $\frac{5}{16}$ inch.....per 100, $1 25

BENT COACH BEDS.



Second Growth Ash.

1⅛	inches	thick,	2	inches	deep	per	dozen,	$12	50
1¼	"	"	2½	"	"	"	"	14	00
1⅜	"	"	3	"	"	"	"	15	50
1½	"	"	3½	"	"	"	"	17	00
1⅝	"	"	4	"	"	"	"	18	50

CONCORD LEAD BARS.

Selected Hickory,		2¼	inch	center,	4	feet	long. . . . per	dozen,	$3	00
"	"	2½	"	"	4	"	" . . . . "		3	50
"	"	3	"	"	4	"	" . . . . "		4	00
Second Growth Hickory,		2¼	"	"	4	"	" . . . . "		5	00
"	"	2½	"	"	4	"	" . . . . "		6	00
"	"	2⅝	"	"	4	"	" . . . . "		7	00

SARVEN PATENT WHEELS.

STANDARD LIST PRICE.

No. of Flange.	Diameter of Hub.	Length of Hub.	Depth of Felloe.	Width of Tire.	Size of Spoke.	Height of Front Wheel.	Height of Hind Wheel.	Price per set Sarven A	Price per set Sarven B	Price per set Sarven C	Price per set Sarven D
09	2⅜	6	⅞	⅝	¾	3 ft. 8	4 ft.	$14 00	$12 00	$ 9 00	$ 7 50
07	2⅝	6&6½	1	¾	¾	3 6	4	"	"	"	"
05	2¾	6&6½	1	¾	13–16	3 10	4 2	"	"	"	"
03	2⅞	6½	1	¾	⅞	3 11	4 2	"	"	"	"
01	2 15–16	6½	1&1⅛	¾&⅞	15–16	3 10 / 3 11	4 2	"	"	"	"
0	3	6½	1⅛	⅞	1	3 10 / 3 11	4 2	"	"	"	"
1	3 1–16	6½	1⅛	⅞&1	1 1–16	4 / 3 11	4 2	"	"	"	"
3	3 3–16	6½	1¼	1	1⅛	4 / 3 8	4 2	"	"	"	"
5	3 5–16	6½	1¼&1 5/16	1&1⅛	1 3–16	3 10 / 3 6	4 2	"	"	"	"
7	3 7–16	6½&7	1¼&1⅜	1&1⅛	1 3–16	3 8 / 3 10	4 2	"	"	"	"
9	3⅝	7	1⅜	1⅛	1¼	3 8 / 3 10	4 2	"	"	"	"
11	3¾	7&7½	1⅜&1½	1⅛&1¼	1 5–16	3 4 / 3 6	4 2	15 00	13 00	9 25	8 00
13	3⅞	7&7½	1⅜&1½	1¼	1⅜	3 8 / 3 10	4 2	"	"	"	"
17	4⅛	7½	1½&1⅝	1¼	1 7–16	3 4 / 3 6	4 2	18 00	16 00	13 00	11 00
21	4 5–16	7½&8	1½&1⅝	1¼&1⅜	1½	3 4 / 3 2	4 2	22 00	18 00	15 00	13 00
25	4⅝	8&8½	1½&1⅝	1⅜	1 9–16	3 4 / 3 6 / 3 2	4 2	24 00	20 00	16 00	14 00
29	4¾	8½&9	1⅝&1¾	1⅜	1⅝	3 4 / 3 6	4 2	"	"	"	"
33	5	8½&9	1⅝&1¾	1½	1⅝	3 4 / 3 6	4 2	25 00	21 00	19 00	17 00
39	5⅝	8½&9	1¾&2	1½to1¾	1¾	3 4 / 3 6	4 2	28 00	23 00	21 00	
45	6	9 to 11	2&2¼	1½to1¾	1⅞	3 2 / 3 4	4 2	31 00	27 00	25 00	
51	6⅜	10 " 11	2¼&2½	1⅝&1¾	2⅛	3 6 / 3 8	4 6	"	"	"	
57	6⅝	10 " 11	2¼&2½	1¾	2¼	3 6 / 3 8	4 8	34 00	29 00		
63	7	11 " 12	2¼&2¾	1¾ to 2	2⅜	3 6	4 8	36 00	31 00		
71	7¼	11 " 13	2¼&2¾	1¾ " 2	2½	3 2 / 3 8	4to4.8	40 00			
73	7¼	11 " 13	2¼ to 3	1¾ " 2	2⅝	3 2 / 3 8	"	44 00			
79	7⅝	11 " 14	2¾ " 3	2 to 2¼	2¾	3 4 / 3 8	"	"			
85	8¼	12 " 14	2¾ " 3	2 " 2¼	2⅞	3 4 / 3 8	"	49 00			
95	9	12 " 16	3 to 3¼	2 " 2½	3	3 4 / 3 8	"	60 00			
105	9	12 " 16	3 " 3¾	2 " 2½	3¼	3 4 / 3 8	"	64 00			

Screws inserted in Rims, 1¼ inch and under.....75 cents per set, net.

GUARD'S WIRE BAND WHEELS.

Size	Grade X	XX	XXX
$\frac{5}{8}$ inch Tire, $\frac{5}{4}$ inch Spoke,	$.....	$14 00	$16 00
$\frac{3}{4}$ " " $\frac{7}{8}$ " "	12 00	14 00	16 00
$\frac{7}{8}$ " " 1 " "	12 00	14 00	16 00
1 " " $1\frac{1}{8}$ " "	12 00	14 00	16 00
$1\frac{1}{8}$ " " $1\frac{1}{4}$ " "	12 00	14 00	16 00
$1\frac{1}{4}$ " " $1\frac{3}{8}$ " "	16 00	18 00	20 00
$1\frac{1}{4}$ " " $1\frac{1}{2}$ " "	18 00	20 00	22 00

Screws in Rims, 75 cents per set additional.

This wheel is made with the greatest care, and is especially intended for fine work. We have sold them largely and recommend them highly.

BANDED HUB WHEELS.

S. N. Brown's.

Size	Grade B	A	Best
$1\frac{1}{4}$ inch Spoke and Lighter,	$10 00	$14 00	$17 00
$1\frac{3}{8}$ " "	10 00	15 00	18 00
$1\frac{1}{2}$ " "	12 00	17 00	20 00
$1\frac{5}{8}$ " "	13 00	19 00	22 00

SULKY WHEELS.

Grade	C	B	A	Extra Fine
Sarven Patent,	$7 00	$8 00	$9 00	$.....
Wood Hubs,	....	7 00	8 00	10 00
Guard's Patent Sulky, for Track.....				12 50
S. N. Brown's Banded Hub, for Track.....				10 00

WOOD HUB BUGGY WHEELS.

No. 1.

FINEST QUALITY, SECOND GROWTH.

¾	Tire,	Height	3	feet	8	inches	and	4	feet	per set,	$15 00
⅞	"	"	3	"	8	"	"	4	"	"	15 00
1	"	"	3	"	8	"	"	4	"	"	15 00
1⅛	"	"	3	"	8	"	"	4	"	"	15 00

No. 2.

SECOND GROWTH HICKORY.

⅞	Tire,	Height	3	feet	8	inches	and	4	feet	per set,	$12 00
1	"	"	3	"	8	"	"	4	"	"	12 00
1⅛	"	"	3	"	8	"	"	4	"	"	12 00
1¼	"	"	3	"	8	"	"	4	"	"	12 00

No. 3.

SECOND QUALITY, SECOND GROWTH.

⅞	Tire,	Height	3	feet	8	inches	and	4	feet	per set,	$9 00
1	"	"	3	"	8	"	"	4	"	"	9 00
1⅛	"	"	3	"	8	"	"	4	"	"	9 00
1¼	"	"	3	"	8	"	"	4	"	"	9 50

No. 4.

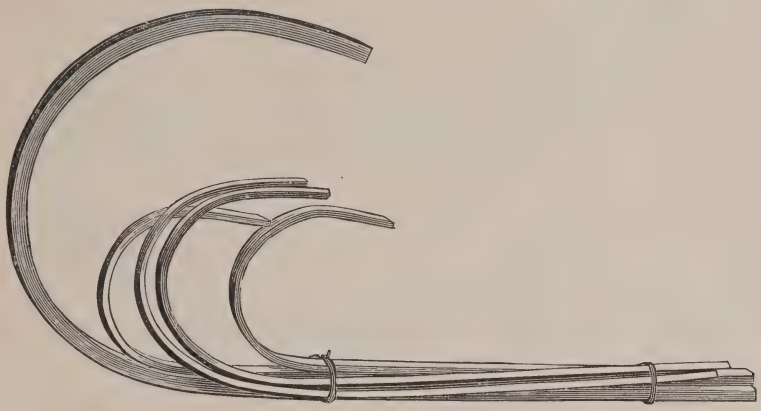
SELECTED FOREST HICKORY.

⅞	Tire,	Height	3	feet	8	inches	and	4	feet	per set,	$8 00
1	"	"	3	"	8	"	"	4	"	"	8 00
1⅛	"	"	3	"	8	"	"	4	"	"	8 00
1¼	"	"	3	"	8	"	"	4	"	"	8 00

Sizes other than stock size mentioned will be made to order.

BENT CUTTER STUFF.

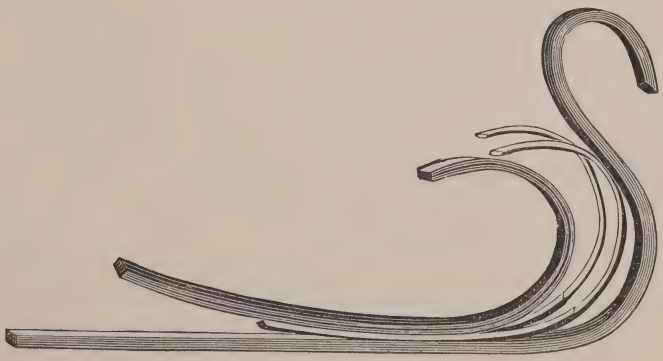
SQUARE BODY.—In Sets.



Runners, Fenders and Raves.

For One Seat, 1¼ Runners.....per set, $1 50
" Two " 1½ " ..... " 1 75

PORTLAND OR DOUBLE BEND.—In Sets.

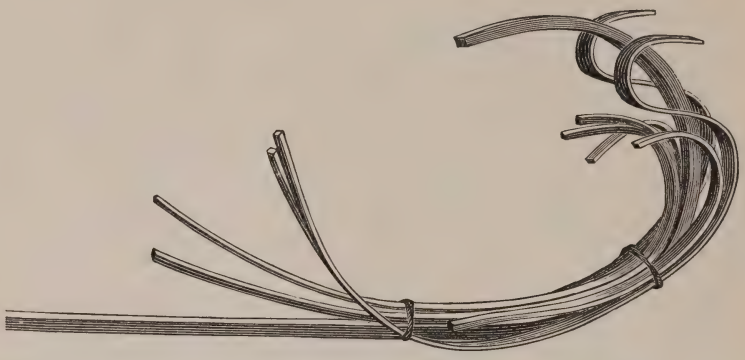


Runners, Fenders and Raves.

For One Seat, 1¼ Runners.....per set, $1 75
" Two " 1½ " ..... " 2 00

BENT CUTTER STUFF.

SWELL BODY.—IN SETS.



Runners, Fenders and Raves.

For One Seat, 1¼ Runners.....per set, $2 00
" Two " 1½ " ..... " 2 50

CUTTER RUNNERS.

Single Bend, 1¼ inches deep.....per pair, $ 75
" " 1½ " " ..... " 1 00
Double Bend, or Portland, 1¼ inches deep..... " 1 00
" " " 1½ " " ..... " 1 25

FENDERS AND RAVES.

Fenders.....per pair, $ 50
Raves..... " 50
Arm pieces for Swell Body, right and left..... " 75

SAWED KNEES AND BEAMS.

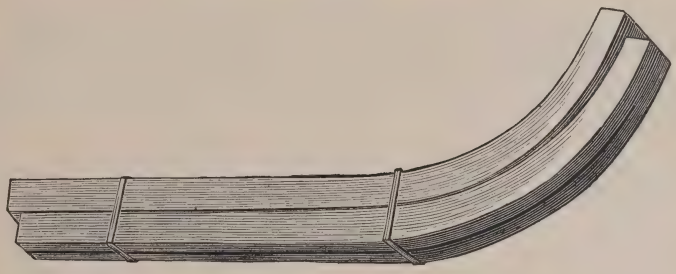
KNEES—Six Pieces to Set.

Selected Hickory, 2 feet 4 in. long, 1⅞ and 1⅛ by 1⅛..per set, $ 40
2d Growth Hickory, 2 " 4 " " 1⅞ " 1⅛ " 1⅛.. " 85

BEAMS—Three Pieces to Set.

Selected Hickory 4 feet long, 1⅞ by 1⅛.....per set, $ 25
2d Growth Hickory, 4 " " 1⅞ " 1⅛..... " 65

BENT BOB RUNNERS.



PRICES.

2½	inches	deep,	2	inches	wide	per set,	$1	50
3	"	"	2	"	"	"	1	85
3½	"	"	2	"	"	"	2	00
4	"	"	2	"	"	"	2	25
4½	"	"	2	"	"	"	2	75
5	"	"	2	"	"	"	3	00
5	"	"	2⅓	"	"	"	3	25
4	"	"	2½	"	"	"	3	00
4½	"	"	2½	"	"	"	4	00
4	"	"	3	"	"	"	3	25
4½	"	"	3	"	"	"	4	50
5	"	"	3	"	"	"	5	25

FANCY BOB SLEIGH STUFF.

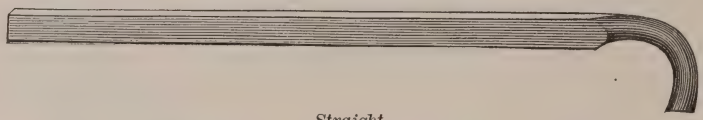
Four Runners, Four Raves, Four Fenders, all Bent,

1¼	inch Runner	per set,	$2	00
1½	" "	"	2	25

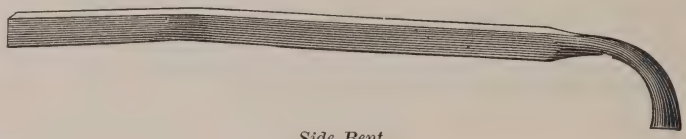
BUGGY SEATS.

Solid Iron.	Square Corner	each,	$2	25
" "	Round Corner	"	2	25
Wood		"	1	75
"	with Handles	"	2	00

PLOW HANDLES.



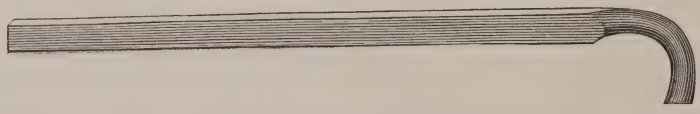
Straight.



Side Bent.

Size	Straight	Side Bent
1¼ by 2 inches, 5 feet long, each	11	14 cents
1¼ " 2¼ " 5 " " "	11½	14½ "
1¼ " 2½ " 5 " " "	12	15 "
1⅜ " 2¼ " 5 " " "	12	15 "
1⅜ " 2½ " 5 " " "	12½	15½ "
1½ " 2¼ " 5 " " "	12½	15½ "
1½ " 2½ " 5 " " "	13	16 "
1½ " 2¾ " 5 " " "	14	17 "
1⅝ " 2½ " 5 " " "	14	17 "
1¾ " 2½ " 5 " " "	15	18 "
1¾ " 3 " 5 " " "	17	20 "

CULTIVATOR HANDLES.



Size	Straight	Side Bent
1¼ by 2 inches, 3½ to 4 feet, each	9	12 cents
1¼ " 2¼ " 3½ " 4 " "	10	13 "
1¼ " 2 " 4½ " "	10	13 "
1¼ " 2¼ " 4½ " "	10½	13½ "

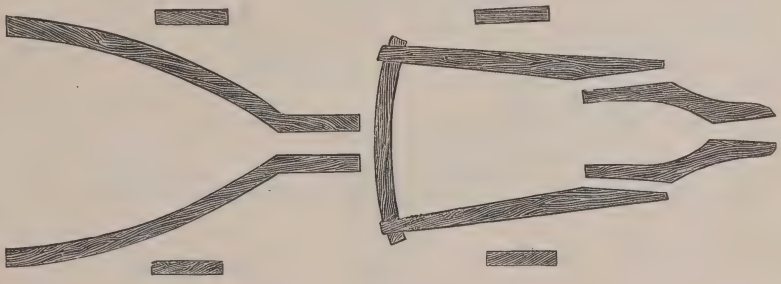
PLOW RUNGS.

24 to 26 inches long.....per 100, $1 80
6 " 13 " " ..... " 1 20

PLOW BEAMS.

Breaker, 3¼ inches thick	each,	60 cents
Stirring, 3 Horse, 3 inches thick	"	50 "
" 2 " 3 " "	"	45 "
" 1 " 2⅜ " "	"	40 "

SAWED WAGON GEARING.



Sets of 11 pieces, as shown in cut	per set,	$1 00
Front Hounds	each,	13
Back Hounds	"	15
Tongue Hounds	"	12
Sliders	"	08
Stakes	per set.	12

BOB SLED GEARING.

KNEE BOBS.

Set of 25 Pieces, viz,,—1 Saddle, 2 Rollers, 10 Knees, 5 Beams, 4 Raves, 1 Reach and 2 Reach Braces

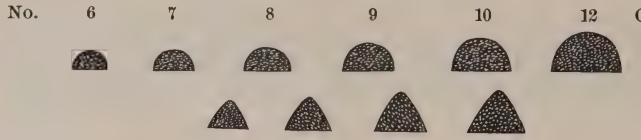
BENCH BOBS.

Set of 15 Pieces, viz.,—1 Saddle, 2 Rollers, 5 Benches, 4 Raves, 1 Reach and 2 Reach Braces

BENCHES.

3 by 9 inches	each,	
3¼ " 9 "	"	

RATTAN MOULDINGS.



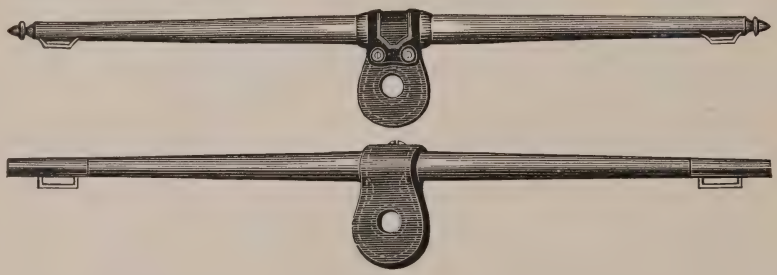
Oval, Per 100 Feet.

No. 6 or $\frac{6}{32}$ inch.....	$ 30	No. 9 or $\frac{9}{32}$ inch.....	$ 60
" 7 " $\frac{7}{32}$ "	40	" 10 " $\frac{5}{16}$ "	85
" 8 " $\frac{1}{4}$ "	50	" 12 " $\frac{3}{8}$ "	1 05

Angle, Per 100 Feet.

No. 7 or $\frac{7}{32}$ inch.....	$ 60	No. 9 or $\frac{9}{32}$ inch.....	$ 85
" 8 " $\frac{1}{4}$ "	75	" 10 " $\frac{5}{16}$ "	1 00

FINISHED CARRIAGE NECK YOKES.



No. 1.—Selected Hickory, Acorn End, $1\frac{1}{2}$ inch center, 44 inches long, with patent N. Y. Leathers.....per dozen, $10 00

No. 2.—Selected Hickory, Acorn End, $1\frac{3}{4}$ inch center, 44 inches long, with patent N. Y. Leathers.....per dozen, $10 00

No. 3.—Selected Hickory, Japanned Malleable Iron Tip, $1\frac{1}{2}$ inch center, 44 in. long, with patent N. Y. Leathers, per dozen, $13 00

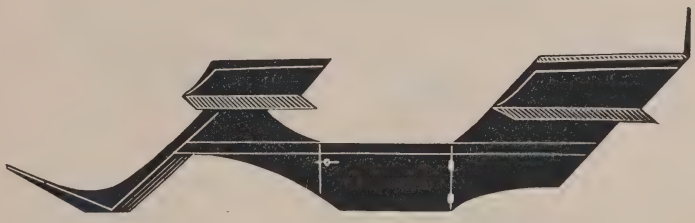
No. 4.—Best Second Growth Hickory, Acorn End, $1\frac{1}{2}$ inch center, 44 inches long, with hand stitched Leathers....per dozen, $18 00

No. 5.—Best Second Growth Hickory, Silver Plated Ferrule Tip, $1\frac{1}{2}$ inch center, 44 inches long, with hand stitched Leathers.....per dozen, $24 00

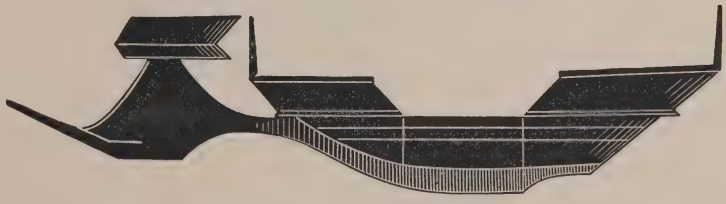
No. 6.—Best Second Growth Hickory, Acorn End, $1\frac{3}{4}$ inch center, 44 inches long, with hand stitched Leathers....per dozen, $19 00

CARRIAGE AND BUGGIE BODIES.

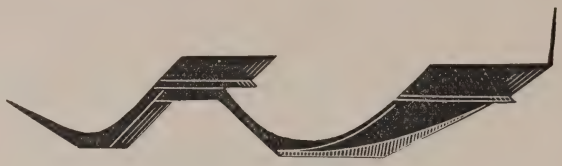
HEARSES AND CUTTERS.



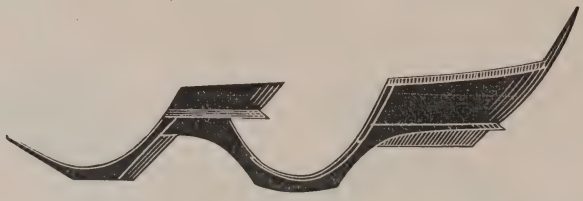
No. 1.—Neapolitan Phaeton..... ...Price, $40 00



No. 2—A very Fine Body for six persons.....Price, $55 00



No. 3.—A very Light and Strong Body.....Price, $35 00

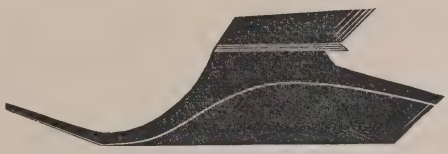


No. 4.—Swell Back Extension.....Price, $35 00

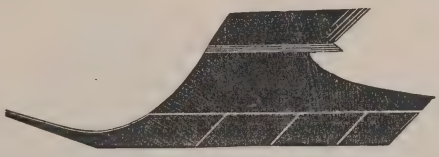
No. 5.—Pony Phaeton.....Price, $40 00

No. 6.—Cabriolet. A first-class Body.....Price, $40 00

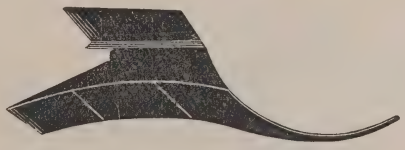
No. 7.—Rochester Pony.....Price, $30 00



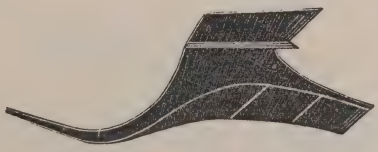
No. 8.—Coal Box.....Price, $10 00



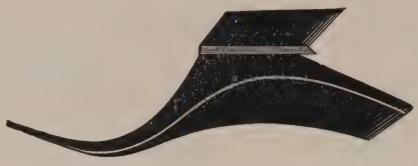
No. 9.—Coal Box.....Price, $10 00



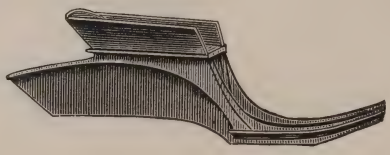
No. 10.—Coal Box, drop front.....Price, $11 00



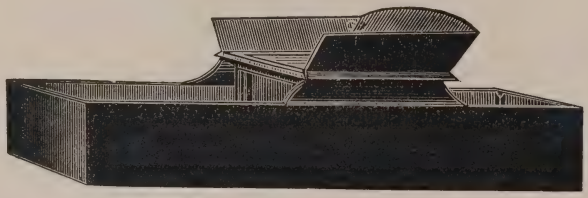
No. 11.—Coal Box, drop front.....Price, $11 00



No. 12.—Coal Box, drop front.....Price, $11 00

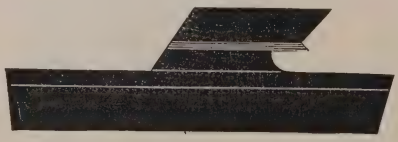


No. 13.—The Grand, drop front.....Price, $12 00

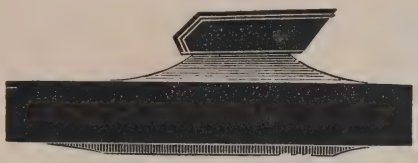


No. 14.—Piano. A very cheap Body.....Price, $7 00

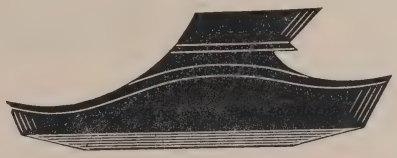
No. 15.—Piano. A very handsome design.....Price, $10 00



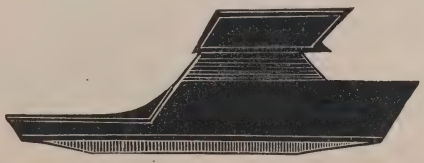
No. 16.—Piano. Plain side.....Price, $9 00



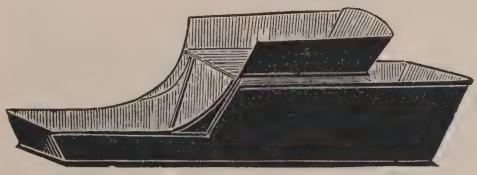
No. 17.—Piano.....Price, $11 00



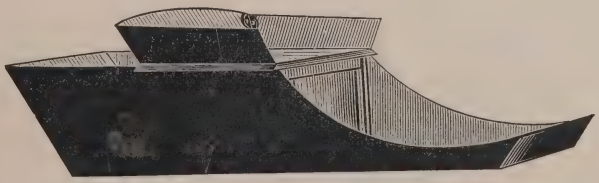
No. 18.—Piano. American Girl.....Price, $11 00



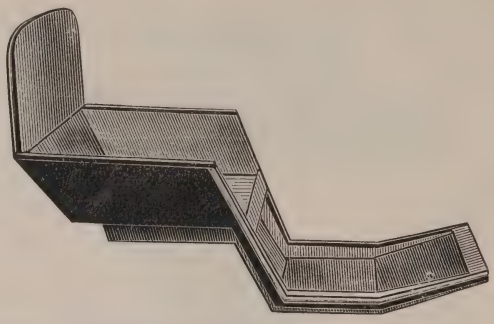
No. 19.—Piano. A Beauty.....Price, $12 00



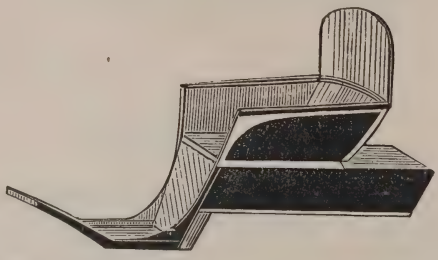
No. 20.—Corning.....Price, $13 00



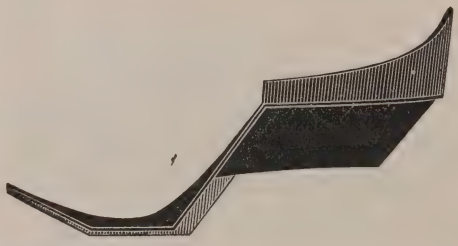
No. 21.—White Chapel.....Price, $13 00



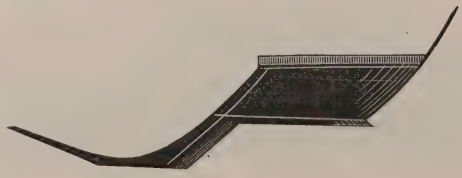
No. 22.—Phaeton. Round or Square Corner.....Price, 10 00



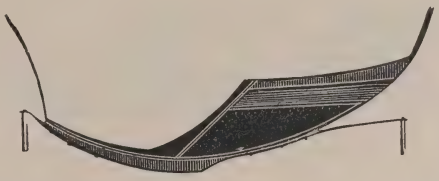
No. 23.—Business Phaeton.....Price, 16 00



No. 24.—Doctors Phaeton.....Price, $22 00

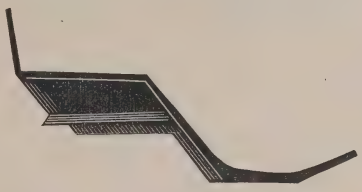


No. 25.—Phaeton.....Price, $17 00



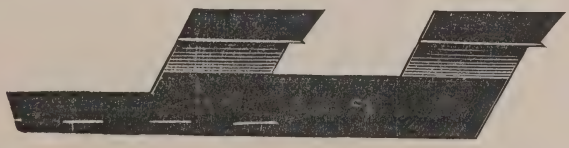
No. 26.—Queen Phaeton.... .....Price, $15 00

No. 27.—Diamond Phaeton.....Price, $15 00



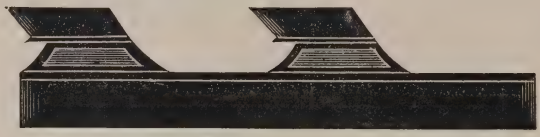
No. 28.—Cleveland Phaeton.....Price, $15 00

No. 29.—Democrat, three movable seats.....Price, $16 00

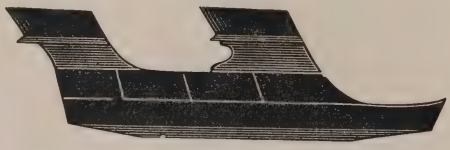


No. 30.—Democrat, Low Front, hind seat movable.....Price, $16 00

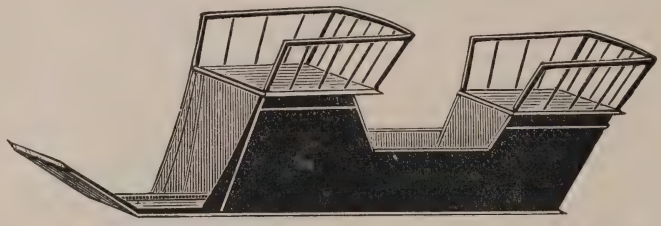
No. 31.—Two Seat Piano, seats movable.....Price, $12 00



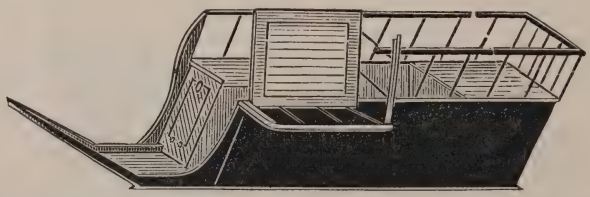
No. 32.—Platform Wagon, bent round corners.....Price, $14 00



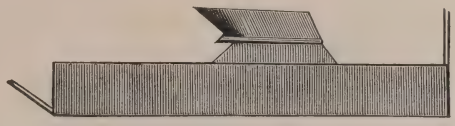
No. 33.—Long Branch, hind seat movable.....Price, $13 00



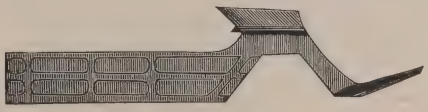
No. 34.—Open Side Surrey.....Price, $27 00
" 34½.-Same as No. 34, with solid seats..... " 18 00



No. 35.—Closed Side Surrey.....Price, $30 00

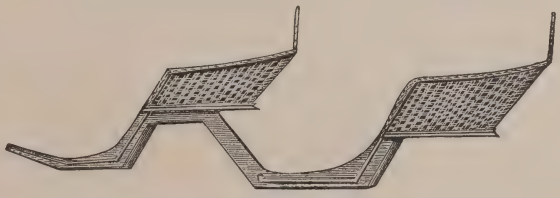


No. 36.—Spring Wagon, six to seven feet long.....Price, $12 00

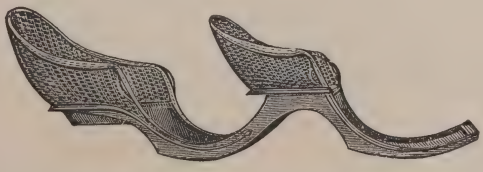


No. 37.—Express, cut under, panel side.....Price, $20 00
" 38.— " same as No. 37, plain side..... " 18 00

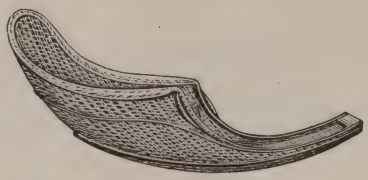
No. 39.—Express, panel side, with or without foot board and drop tail board, three panels.....Price, $16 00
" 40.—Same as No. 39, with two panels..... " 15 00



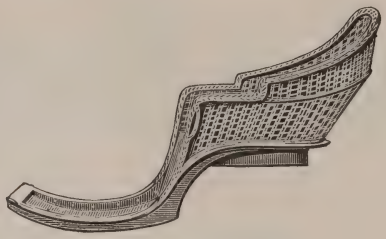
No. 41.—Two Seat Basket Phaeton, with eyes for Canopy or Leather Top.....Price, $45 00



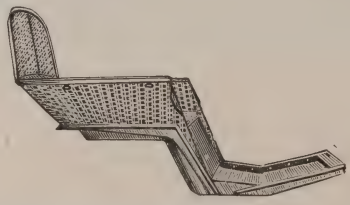
No. 42.—Two Seat Basket Phaeton, for Open Carriage...Price, $42 00



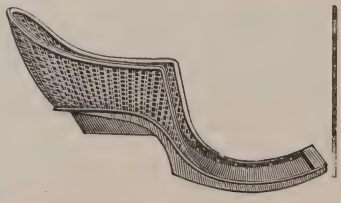
No. 43.—Queen Phaeton, no Top.....Price, $23 00



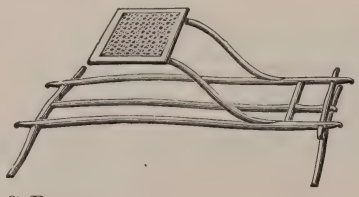
No. 44.—Basket Double Rail Phaeton, for Canopy or Leather Top.....Price, $25 00



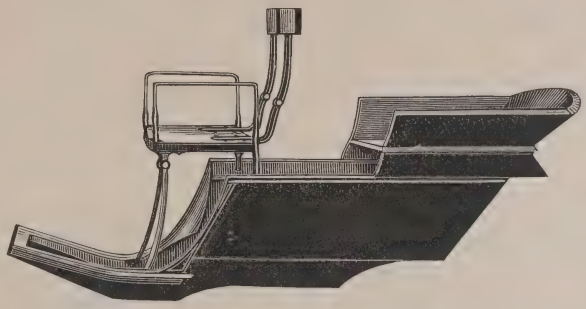
No. 45.—Square Corner Basket, for Canopy.....Price, $25 00



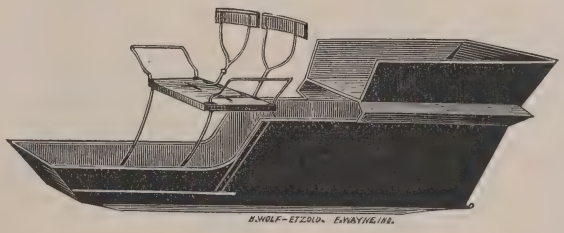
No. 46.—Basket Phaeton, no Top.....Price, $22 00



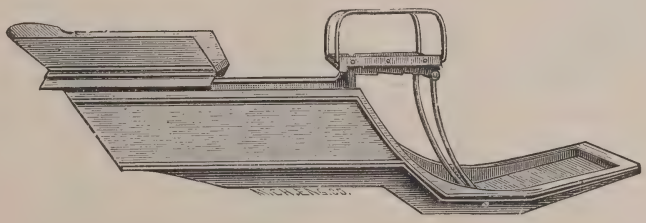
No. 47.—Skeleton C Parts.....Price, $15 00



No. 48.—Miller Phaeton Eureka, for Side Bars, Side or Elliptic Springs.....Price, $30 00



No. 49.—Miller Park Eureka, for two Springs, three Springs or French Platform Springs.....Price, $30 00

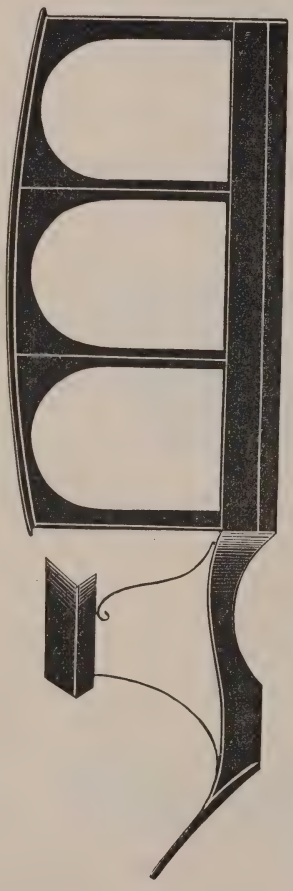


No. 50.—Ypsilanti Shifting Seat.....Price, $30 00

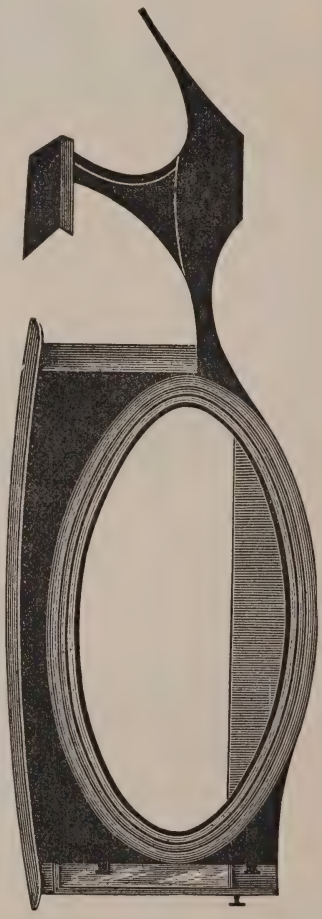
HEARSE BODIES.

Without Glass.

Glass and Wooden Urns furnished if desired, and prices made on application.



No. 51.—Hearse.....Price, $70 00
" 52.—With Contracted Boot..... " 80 00

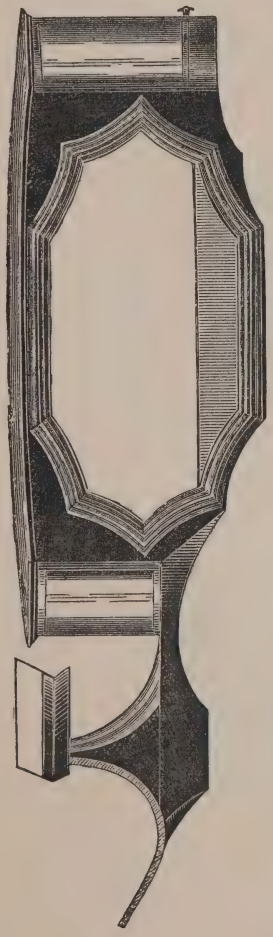


No. 53.—Hearse, with Flat Boot.....Price $150 00
" 54.— " with Round Boot..... " 165 00

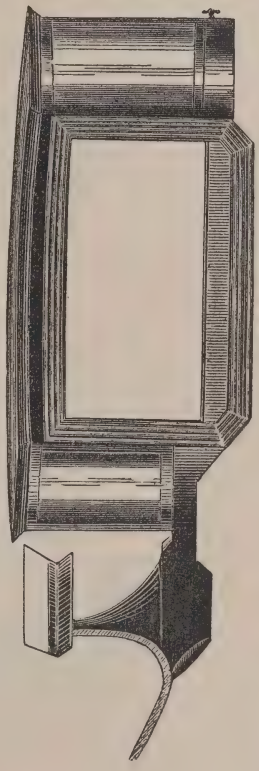
HEARSE BODIES.

Without Glass.

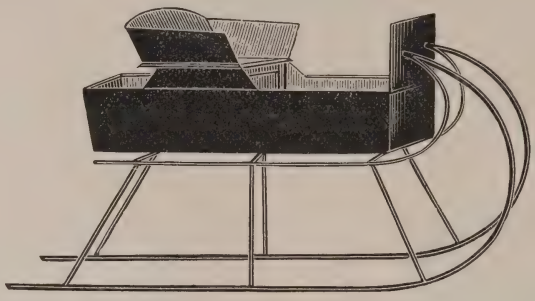
Glass and Wooden Urns furnished if desired, and prices made on application.



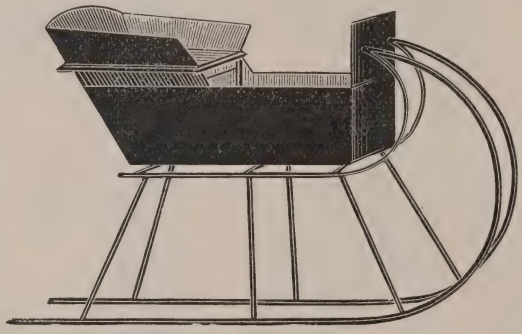
No. 55.—Hearse. New style.....Price, $180 00



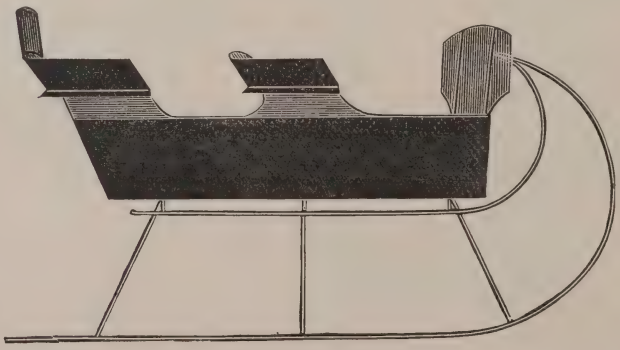
No. 56.—Hearse. New design.....Price, $180 00



No. 57.—Square Box Cutter.....Price, $8 00

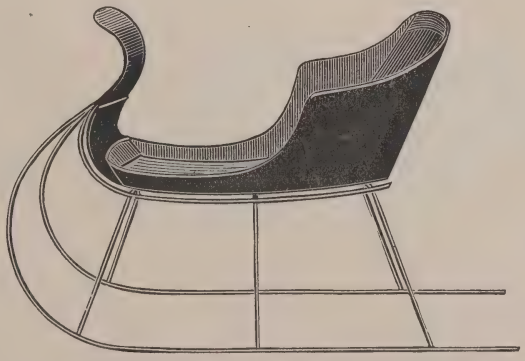


No. 58.—Sporting Cutter.....Price, $10 00

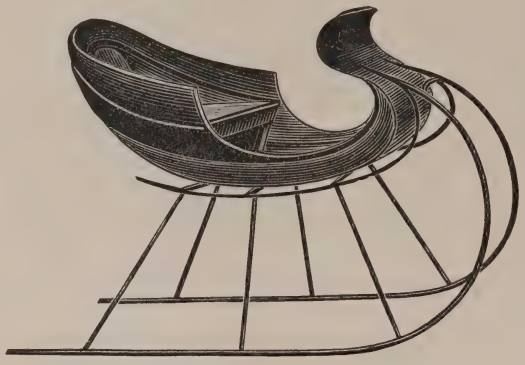


No. 59.—Two Seat Square Box Sleigh.....Price, $12 00

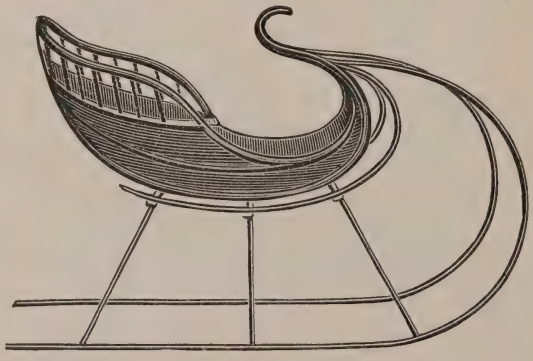
No. 60.—Portland Cutter.....Price, $14 00



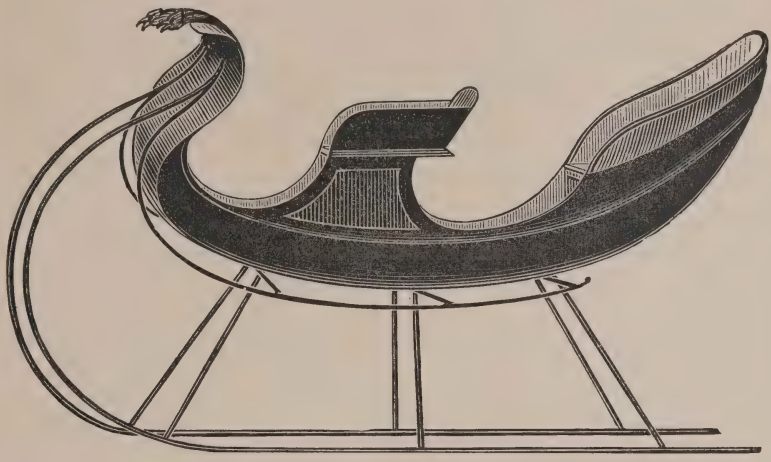
No. 61.—Portland Cutter.....Price, $12 00



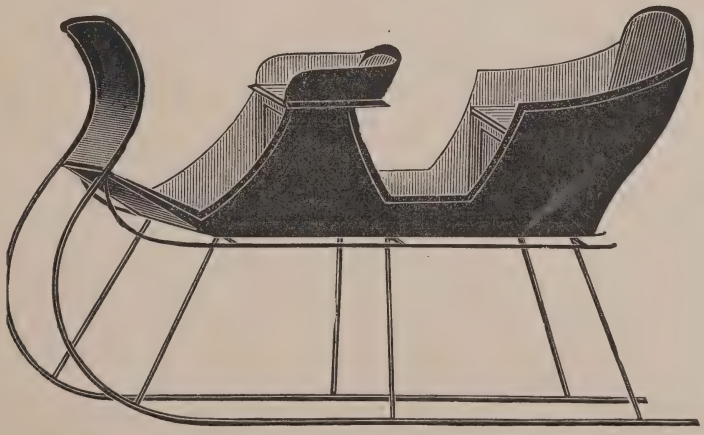
No. 62.—Swell Body Cutter, first quality Second Growth Knees and Beams.....Price, $15 00
" 63.—Same as No. 62, second quality..... " 12 00



No. 64.—Swell Body Cutter.....Price, $15 00



No. 65.—Four Passenger Swell Body Sleigh .....Price, $30 00



No. 66.—Four Passenger Portland Sleigh.....Price, $26 00

HAMMER HANDLES.

Second Growth Hickory.

SLEDGE.

30	inches	long		per dozen,	$2 25
32	"	"		"	2 50
34	"	"		"	2 75
36	"	"		"	3 00

BLACKSMITHS.

14	inches	long		per dozen,	$1 75
16	"	"		"	1 75
18	"	"		"	1 75
20	"	"		"	1 75
24	"	"	Cold Chisel	"	1 75

WAGON LUMBER.

The prices on all kinds of lumber mentioned in the following Catalogue are for seasoned stock only; and customers may rely upon getting goods exactly as represented.

We cut all our lumber fully $\frac{1}{8}$ inch strong, or larger when green; but as some lumber shrinks more than others, in some cases, sizes given in our Catalogue may be a trifle scant when dry. We desire it understood that we do not guarantee all our stock to measure full to the sizes given in our Catalogue, when dry.

An additional charge of $3 00 per one thousand feet will be made for planing or dressing on both sides, or $1 50 per one thousand feet for dressing on one side, any kind of lumber in Catalogue.

We have facilities for getting out all kinds of strips or dimension stuff for wagon and carriage manufacturing, and will make close prices on application with specifications.

SELECTED WHITE OAK.

Butt Logs.

1	inch	thick,	10	to	14	feet	long	per	1000 feet,	$40 00
1¼	"	"	10	"	14	"	"	"	"	40 00
1½	"	"	10	"	14	"	"	"	"	40 00
1¾	"	"	10	"	14	"	"	"	"	40 00
2	"	"	10	"	14	"	"	"	"	40 00
2¼	"	"	10	"	14	"	"	"	"	40 00
2½	"	"	10	"	14	"	"	"	"	40 00
3	"	"	10	"	14	"	"	"	"	45 00
3½	"	"	10	"	14	"	"	"	"	45 00
4	"	"	10	"	14	"	"	"	"	50 00

SECOND GROWTH WHITE OAK.

Small Tough Butt Logs.

1	inch	thick,	8	to	12	feet	long	.....	per 1000 feet,	$60 00
1¼	"	"	8	"	12	"	"	.....	"	60 00
1½	"	"	8	"	12	"	"	.....	"	60 00
1¾	"	"	8	"	12	"	"	.....	"	60 00
2	"	"	8	"	12	"	"	.....	"	60 00

WAGON BOLSTERS.

3	by	4	inches,	Narrow	Track,	to	cut	4	feet	long,	per 1000 feet, $40 00
3¼	"	4¼	"	"	"	"		4	"	"	" 40 00
3½	"	4½	"	"	"	"		4	"	"	" 40 00
3½	"	5	"	"	"	"		4	"	"	" 40 00
4	"	5	"	"	"	"		4	"	"	" 40 00
4½	"	5½	"	"	"	"		4	"	"	" 40 00
5	"	6	"	"	"	"		4	"	"	" 40 00
3	"	4	"	Wide	Track,	"		4½	"	"	" 40 00
3¼	"	4¼	"	"	"	"		4½	"	"	" 40 00
3½	"	4½	"	"	"	"		4½	"	"	" 40 00
3½	"	5	"	"	"	"		4½	"	"	" 40 00
4	"	5	"	"	"	"		4½	"	"	" 40 00
4½	"	5½	"	"	"	"		4½	"	"	" 40 00
5	"	6	"	"	"	"		4½	"	"	" 40 00

WAGON SAND BOARDS.

2½	by	4	inches,	Narrow	Track,	to	cut	4	feet	long,	per 1000 feet, $40 00
3	"	4	"	"	"	"		4	"	"	" 40 00
2½	"	4	"	Wide	Track	"		4½	"	"	" 40 00
3	"	4	"	"	"	"		4½	"	"	" 40 00

WAGON REACHES.

2	by	4	inches	8	feet	long	.....	per 1000 feet,	$40 00
2	"	4	"	9	"	"	.....	"	40 00
2	"	4	"	10	"	"	.....	"	40 00
2	"	4	"	12	"	"	.....	"	40 00
2¼	"	4½	"	10	"	"	.....	"	40 00
2½	"	4½	"	12	"	"	.....	"	40 00
2½	"	4½	"	12	"	"	.....	"	40 00

FOREST HICKORY OR—X.

1	inch	thick,	8	to	12	feet	long	per 1000 feet,	$35 00
1¼	"	"	8	"	12	"	"	"	35 00
1½	"	"	8	"	12	"	"	"	35 00
1¾	"	"	8	"	12	"	"	"	35 00
2	"	"	8	"	12	"	"	"	35 00
2¼	"	"	8	"	12	"	"	"	35 00
2½	"	"	8	"	12	"	"	"	35 00
3	"	"	8	"	12	"	"	"	35 00

SELECTED HICKORY OR—XX.

1	inch	thick,	8	to	12	feet	long	per 1000 feet,	$45 00
1¼	"	"	8	"	12	"	"	"	45 00
1½	"	"	8	"	12	"	"	"	45 00
1¾	"	"	8	"	12	"	"	"	45 00
2	"	"	8	"	12	"	"	"	45 00
2¼	"	"	8	"	12	"	"	"	45 00
2½	"	"	8	"	12	"	"	"	45 00
3	"	"	8	"	12	"	"	"	45 00

EXTRA SELECTED HICKORY OR—XXX.

Small Tough Butt Logs.

1	inch	thick,	8	to	12	feet	long	per 1000 feet,	$60 00
1¼	"	"	8	"	12	"	"	"	60 00
1½	"	"	8	"	12	"	"	"	60 00
1¾	"	"	8	"	12	"	"	"	60 00
2	"	"	8	"	12	"	"	"	60 00

SECOND GROWTH HICKORY.

Small Butts, Four to Ten Inches Diameter.

1	inch	thick,	4	to	10	feet	long	per 1000 feet,	$150 00
1¼	"	"	4	"	10	"	"	"	150 00
1½	"	"	4	"	10	"	"	"	150 00
1¾	"	"	4	"	10	"	"	"	150 00
2	"	"	4	"	10	"	"	"	150 00

HICKORY WAGON AXLETREES.

2½	by 3½	inches,	6	feet	long	.....	per 1000 feet,	$60	00
3	" 4	"	6	"	"	.....	"	60	00
3¼	" 4¼	"	6	"	"	.....	"	60	00
3½	" 4½	"	6	"	"	.....	"	60	00
4	" 5	"	6	"	"	.....	"	60	00
4½	" 5½	"	6	"	"	.....	"	60	00
5	" 6	"	6	"	"	.....	"	60	00
6	" 7	"	6	"	"	.....	"	60	00

HICKORY-ELM WAGON AXLETREES.

2½	by 3½	inches,	6	feet	long	.....	per 1000 feet,	$50	00
3	" 4	"	6	"	"	.....	"	50	00
3½	" 4½	"	6	"	"	.....	"	50	00
4	" 5	"	6	"	"	.....	"	50	00

This lumber has been thoroughly tested and found in every respect equal to first-class hickory.

ASH WAGON TONGUES.

FIRST QUALITY.

3½	by 3½	in. at Butt,	and	2	by	3½	in. at Small end	.....	each,	$	75
4	" 4	" "	"	2	"	4	" "	.....	"		75
4	" 5	" "	"	2½	"	4	" "	.....	"	1	00

SECOND GROWTH.

3½	by 3½	in. at Butt,	and	2	by	3½	in. at Small end	.....	each,	$1	00
4	" 4	" "	"	2	"	4	" "	.....	"	1	00
4	" 5	" "	"	2½	"	4	" "	.....	"	1	25

SECONDS.

All sizes	each,	$ 40

OAK WAGON TONGUES.

First Quality,	4	by 4	in. at Butt,	and	2	by	4	in. at Small end	...	each,	$	60
Seconds,	4	" 4	" "	"	2	"	4	" "	...	"		40

SELECTED WHITE ASH.

FIRST QUALITY.

$\frac{8}{4}$	inches	thick,	10	to	14	feet	long	per 1000 feet,	$40 00
$\frac{7}{8}$	"	"	10	"	14	"	"	"	40 00
1	"	"	10	"	14	"	"	"	40 00
$1\frac{1}{4}$	"	"	10	"	14	"	"	"	40 00
$1\frac{1}{2}$	"	"	10	"	14	"	"	"	40 00
$1\frac{3}{4}$	"	"	10	"	14	"	"	"	40 00
2	"	"	10	"	14	"	"	"	40 00
$2\frac{1}{4}$	"	"	10	"	14	"	"	"	40 00
$2\frac{1}{2}$	"	"	10	"	14	"	"	"	40 00
3	"	"	10	"	14	"	"	"	45 00
$3\frac{1}{2}$	"	"	10	"	14	"	"	"	45 00
4	"	"	10	"	14	"	"	"	50 00

SECOND QUALITY.

1	inches	thick,	10	to	14	feet	long	per 1000 feet,	$30 00
$1\frac{1}{4}$	"	"	10	"	14	"	"	"	30 00
$1\frac{1}{2}$	"	"	10	"	14	"	"	"	30 00
$1\frac{3}{4}$	"	"	10	"	14	"	"	"	30 00
2	"	"	10	"	14	"	"	"	30 00
$2\frac{1}{4}$	"	"	10	"	14	"	"	"	30 00

SECOND GROWTH.

1	inches	thick,	10	to	14	feet	long	per 1000 feet,	$60 00
$1\frac{1}{4}$	"	"	10	"	14	"	"	"	60 00
$1\frac{1}{2}$	"	"	10	"	14	"	"	"	60 00
$1\frac{3}{4}$	"	"	10	"	14	"	"	"	60 00
2	"	"	10	"	14	"	"	"	60 00

HARD MAPLE.

2	inches	thick,	12	feet	long			per 1000 feet,	$40 00
$2\frac{1}{2}$	"	"	12	"	"			"	40 00

HARROW OR DRAG STUFF.

OAK.

$2\frac{1}{4}$	by	$2\frac{1}{4}$	inches,	14	feet	long		per 1000 feet,	$45 00
$2\frac{1}{2}$	"	$2\frac{1}{2}$	"	14	"	"		"	45 00
3	"	3	"	14	"	"		"	45 00

YELLOW POPLAR.

FIRST QUALITY.

¼	inch	thick,	12	to	14	feet	long	per 1000 feet,	$40 00
5/16	"	"	12	"	14	"	"	"	40 00
⅜	"	"	12	"	14	"	"	"	40 00
½	"	"	12	"	14	"	"	"	40 00
⅝	"	"	12	"	14	"	"	"	40 00
¾	"	"	12	"	14	"	"	"	40 00
1	"	"	12	"	14	"	"	"	40 00
1¼	"	"	12	"	14	"	"	"	40 00
1½	"	"	12	"	14	"	"	"	40 00
1¾	"	"	12	"	14	"	"	"	40 00
2	"	"	12	"	14	"	"	"	40 00
2¼	"	"	12	"	14	"	"	"	40 00
2½	"	"	12	"	14	"	"	"	40 00
3	"	"	12	"	14	"	"	"	45 00
3½	"	"	12	"	14	"	"	"	45 00
4	"	"	12	"	14	"	"	"	50 00

SECOND QUALITY.

½	inch	thick,	12	to	14	feet	long	per 1000 feet,	$30 00
⅝	"	"	12	"	14	"	"	"	30 00
¾	"	"	12	"	14	"	"	"	30 00
1	"	"	12	"	14	"	"	"	30 00
1¼	"	"	12	"	14	"	"	"	30 00
1½	"	"	12	"	14	"	"	"	30 00
1¾	"	"	12	"	14	"	"	"	30 00
2	"	"	12	"	14	"	"	"	30 00

YELLOW POPLAR WAGON BOX BOARDS.

8	inches	wide,	12	or	14	feet	long	per 1000 feet,	$40 00
10	"	"	12	"	14	"	"	"	40 00
12	"	"	12	"	14	"	"	"	40 00
14	"	"	12	"	14	"	"	"	40 00
16	"	"	12	"	14	"	"	"	40 00

For dressing above on both sides, $3 00 per 1000 additional.

WHITE WOOD.

FIRST QUALITY.

½	inch	thick,	12	to	14	feet	long	per 1000 feet,	$30 00
⅝	"	"	12	"	14	"	"	"	30 00
¾	"	"	12	"	14	"	"	"	30 00
1	"	"	12	"	14	"	"	"	30 00

SECOND QUALITY.

½	inch	thick,	12	to	14	feet	long	per 1000 feet,	$25 00
⅝	"	"	12	"	14	"	"	"	25 00
¾	"	"	12	"	14	"	"	"	25 00
1	"	"	12	"	14	"	"	"	25 00

WHITE WOOD WAGON BOX BOARDS.

We consider this the best material in use for the purpose, and recommend it highly to our customers as better than either Yellow Poplar or Bass Wood.

8	inches	wide,	12	or	14	feet	long	per 1000 feet,	$35 00
10	"	"	12	"	14	"	"	"	35 00
12	"	"	12	"	14	"	"	"	35 00
14	"	"	12	"	14	"	"	"	35 00
16	"	"	12	"	14	"	"	"	35 00

BASS WOOD.

5/16	inch	thick,	12	to	14	feet	long	per 1000 feet,	$30 00
⅜	"	"	12	"	14	"	"	"	30 00
½	"	"	12	"	14	"	"	"	30 00
⅝	"	"	12	"	14	"	"	"	30 00
¾	"	"	12	"	14	"	"	"	30 00
1	"	"	12	"	14	"	"	"	30 00

BASS WOOD WAGON BOX BOARDS.

8	inches	wide,	12	or	14	feet	long	per 1000 feet,	$35 00
10	"	"	12	"	14	"	"	"	35 00
12	"	"	12	"	14	"	"	"	35 00
14	"	"	12	"	14	"	"	"	35 00
16	"	"	12	"	14	"	"	"	35 00

For dressing above on both sides $3 00 per 1000 feet additional.

APPROXIMATE WEIGHTS OF WOOD STOCK.

WAGON SPOKES.—Per Set.

Size,	2	2⅛	2¼	2⅜	2½	2⅝	2¾	3	3¼	3½	inches
XX	50	58	60	62	66	70	..	..	..	..	lbs
XXX	52	60	65	70	75	78	90	95	110	120	"
Royal,	61	65	69	74	82	95	110	115	125	140	"
Second Growth,	67	70	75	78	95	105	120	125	145	160	"

BUGGY AND CARRIAGE SPOKES.—Per Set.

Size,	1	1⅛	1¼	1⅜	1½	1⅝	1¾	inches
Select Hickory,	28	31	34	38	40	45	50	lbs
Second Growth,	33	40	44	50	54	57	60	"

BUGGY AND CARRIAGE HUBS.—Per Set.

Diameter,	3½	4	4½	5	5½	5½	5¾	6	6½	7	inches
Weight,	4	5	7	9	10	12	14	18	20	25	lbs

WAGON HUBS.—Per Set

Diameter,	7½	8	8¼	8½	9	9½	10	10½	11	12	inches
Weight,	27	40	45	50	55	70	85	90	110	120	lbs

BENT RIMS.—Per Set.

Size,	1	1⅛	1¼	1⅜	1½	1⅝	1¾	2 x 1¾	inches
Weight,	20	25	31	36	45	55	60	65	lbs
Size,	2 x 2	1¾ x 2¼	1⅞ x 2¼	2 x 2¼	2¼ x 2¼	2 x 2½			inches
Weight,	75	75	80	85	90	90			lbs

BROAD BENT RIMS.—Per Set.

Size,	2½ x 2	3 x 2	3½ x 2	4 x 2	inches
Truck,	95	110	125	135	lbs
Wagon,	100	120	135	145	"

BENT POLES.—Per Dozen.

Size,	2 x 2½	2 x 2¾	2¼ x 3	2¼ x 3¼	inches
Rough,	180	200	250	300	lbs
Finished,	160	180	230	275	"

BENT SHAFTS.—Per Dozen Pairs.

Size,	1½ x 2	1⅝ x 2¼	1¾ x 2½	2 x 2½	inches
Rough,	150	180	200	220	lbs
Finished,	140	170	190	200	"

SAWED WAGON FELLOES.—Per Set.

Size,	1⅝ x 2¼	1¾ x 2⅝	2 x 2½	2 x 2⅝	2 x 2¾	2¼ x 3	inches
Green,	70	90	100	110	115	140	lbs
Dry,	50	70	80	90	95	115	"

SAWED TRUCK FELLOES.—Per Set.

Size,	2½ x 2½	3 x 2½	3½ x 2½	4 x 2½	inches
Weight,	95	115	134	150	lbs

WAGON BOWS.—Per Set.

Size,	2 x ⅝	2½ x ⅝	3 x ⅝	2 x ¾	2½ x ¾	3 x ¾	inches
Weight,	18	27	35	20	30	40	lbs

WAGON NECK YOKES.—Per Dozen.

Nos.	1 and 2	3 and 4	5 and 6	7 and 8	11 and 12
Weight,	40	45	58	70	44 lbs

WAGON SINGLETREES.—Per Dozen.

Nos.	49 and 54	50 and 55	51 and 56	53 and 57	52 Plow
Weight,	32	42	54	42	28 lbs

PLOW HANDLES.—Per Dozen.

Size,	1¼ x 2	1¼ x 2¼	1¼ x 2½	1½ x 2¼	1½ x 2½	inches
Weight,	40	46	54	58	64	lbs

SAWED WAGON GEARING.

Front Hounds,	each, 12 lbs	Sliders	each, 5 lbs
Back "	" 13 "	Set 4 Stakes	" 7 "
Tongue "	" 6 "	Set Gearing, 11 pieces,	" 74 "

BENT BOB RUNNERS.—Per Set.

Size,	2 x 3	2 x 3½	2 x 4	2 x 4½	2 x 5	inches
Weight,	65	70	75	80	90	lbs

BUGGY WHEELS.—Per Set.

Size,	⅞ to 1⅛ Tire	1¼ Tire	1⅜ Tire	1½ Tire
Weight,	50	75	95	125 lbs

PLOW BEAMS.—Each.

One Horse	Two Horse	Three Horse	
Weight, 16	21	26	lbs

BUGGY PARTS.—Rough.

Spring Bars	each, 4½ lbs	Cross Bars	each, 5½ lbs
Axle Beds	" 12 "	Reaches	" 3 "
Head Blocks	" 2 "	Doubletrees	" 6 "

HICKORY AXLES.—Per Pair.

Size,	3 x 4	3½ x 4½	4 x 5	4½ x 5½	5 x 6	6 x 7	inches
Weight,	54	80	90	110	115	210	lbs

WAGON BOLSTERS.—Each.

Size,	3 x 4	3½ x 4½	3½ x 4½	3½ x 5	4 x 5	inches
Weight,	18	21	25	28	33	lbs

LUMBER.—Per 1000 Feet.

Hickory	4,500 lbs	Yellow Poplar	3,500 lbs
Oak	4,500 "	White Wood	3,500 "
Ash	4,250 "	Bass Wood	3,500 "
Ash Tongues, (each)	40 "	Maple	4,250 "

SUNDRIES.

Wagon Eveners, W.T.	doz 105 lbs	Pole Circles	doz 25 lbs
" " N.T.	" 95 "	Buggy Bows	set 15 "
Express "	" 40 "	Express, 4 Bow	" 20 "
Buggy "	" 35 "	" 5 "	" 25 "
Buggy Neck Yokes	" 22 "	Bent Hounds	each 15 "
Express " "	" 26 "	Iron Seats	" 13 "
Buggy Singletrees	" 20 "	Wood Seats	" 10 "
Express "	" 26 "	Cutter Stuff	set 25 "
Buggy Body, 1 seat	each 50 "	Cutter Runners	pair 11 "
" " 2 "	" 100 "	Cutter, 1 seat	each 50 "
Phaeton "	" 65 "		

The foregoing weights were obtained by weighing stock on hand, and are actual weights. The difference in quality of dryness of timber makes it impossible to have them absolutely correct; but these will be found to approximate very closely, and may be safely used for shipping purposes.

WEIGHT OF ELLIPTIC SPRINGS.

Inches.	Inches.	Weigh about.	Inches.	Inches.	Weigh about..
1¼	3 x 34	28 lb. ℔ Pair	1¾	4 x 38	53 lb. ℔ Pair
1¼	3 x 36	30 " "	1¾	5 x 36	60 " "
1¼	4 x 34	32 " "	1¾	5 x 38	66 " "
1¼	4 x 36	35 " "	1¾	5 x 40	69 " "
1¼	4 x 38	36 " "	1¾	6 x 36	69 " "
1⅜	3 x 34	31 " "	1¾	6 x 38	75 " "
1⅜	3 x 36	33 " "	1¾	6 x 40	77 " "
1⅜	4 x 34	37 " "	2	4 x 36	54 " "
1⅜	4 x 36	39 " "	2	4 x 38	60 " "
1½	3 x 34	35 " "	2	4 x 40	65 " "
1½	4 x 34	40 " "	2	5 x 36	69 " "
1½	4 x 36	42 " "	2	5 x 38	76 " "
1½	4 x 38	46 " "	2	5 x 40	79 " "
1½	5 x 36	50 " "	2	6 x 36	79 " "
1½	5 x 38	51 " "	2	6 x 38	85 " "
1¾	4 x 36	50 " "	2	6 x 40	89 " "

WEIGHT OF PLATFORM SPRINGS.

Width.	No. Plates.	Side.	Cross.	Weight.
1¼ inch.	3 and 4	38	40	65
1¼ "	3 " 4	38	42	67
1¼ "	4 " 5	38	40	70
1¼ "	4 " 5	38	42	72
1⅜ "	4 " 5	38	40	75
1⅜ "	4 " 5	38	42	78
1½ "	3 " 4	38	40	74
1½ "	3 " 4	38	42	76
1½ "	4 " 5	38	40	83
1½ "	4 " 5	38	42	87
1½ "	5 " 6	38	40	93
1½ "	5 " 6	38	42	103
1¾ "	4 " 5	40	42	106
1¾ "	5 " 6	40	42	118
2 "	5 " 6	40	42	140
2 "	6 " 7	40	42	160
2 "	7 " 8	40	42	195
2¼ "	6 " 7	40	42	205
2¼ "	7 " 8	40	42	225
2½ "	8 " 9	40	42	275
2½ "	9 " 10	42	44	295
2½ "	10 " 11	42	44	308
2¾ "	10 " 12	42	44	355
2¾ "	12 " 14	42	44	390
3 "	12 " 14	44	48	450

These weights are not given as exact, but are about the average. Two Cross Springs and four Side make set Platform Springs.

WEIGHT OF CONCORD SIDE SPRINGS.—PER PAIR.

Size,	1¼ x 4	1¼ x 5	1½ x 4	1½ x 5	1⅝ x 5	inches
Weight,	28	34	38	42	45	lbs

WEIGHT OF HALF OR BOLSTER SPRINGS.—Per Pair.

Size,	1½ x 4	1½ x 5	1⅝ x 4	1⅝ x 5	2 x 5	2 x 6	inches
Weight,	26	30	26	36	40	42	lbs

WEIGHT OF COMMON IRON AXLES.—Per Pair.

Size,	1⅛	1¼	1⅜	1½	1⅝	1¾	2	2¼	2½	inches
Weight,	54	64	83	100	120	145	200	256	320	lbs

WEIGHT OF HALF PATENT AXLES.—Per Set.

LONG BEDS.—REGULAR SIZES.

Size,	1	1⅛	1¼	1⅜	1½	1⅝	1¾	2	inches
Weight,	40	50	60	78	95	114	142	186	lbs

SHORT BEDS.—REGULAR SIZES.

Size,	1	1⅛	1¼	1⅜	1½	1⅝	1¾	2	inches
Weight,	23	27	37	47	55	75	97	121	lbs

SIZE OF POINT BAND FOR SARVEN WHEELS.

No. Flange.	*Width Tire.*	*Size Spoke.*	*Size Band.*
09	⅝ inch	⅞ inch	1⅜ inch
07	⅞ "	⅞ "	1⅞ "
05	⅞ "	13/16 "	2 "
03	⅞ "	⅞ "	2⅛ "
01	⅞ "	15/16 "	2¼ "
0	⅞ "	1 "	2¼ "
1	⅞ or 1 inch	1 1/16 "	2⅜ "
3	1 inch	1⅛ "	2½ "
5	1 "	1 3/16 "	2⅝ "
7	1 or 1⅛ inch	1 3/16 "	2⅝ "
9	1⅛ inch	1¼ "	2⅞ "
11	1⅛ or 1¼ inch	1 5/16 "	2⅞ "
13	1⅛ " 1¼ "	1⅜ "	3 "

WEIGHT OF FLAT ROLLED IRON.

ONE FOOT IN LENGTH.

WIDTH.	THICKNESS.											
INCHES.	$\frac{1}{8}$ in.	$\frac{3}{16}$ in.	$\frac{1}{4}$ in.	$\frac{5}{16}$ in.	$\frac{3}{8}$ in.	$\frac{7}{16}$ in.	$\frac{1}{2}$ in,	$\frac{5}{8}$ in.	$\frac{3}{4}$ in.,	$\frac{7}{8}$ in.	1 in.	$1\frac{1}{4}$ in.
$\frac{1}{2}$	.242	.316	.422	.528	.634	.738	.845	1.056	1.265	1.477	1.690	2.112
$\frac{5}{8}$	.276	.395	.528	.660	.792	.923	1.056	1.320	1.584	1.846	2.112	2.640
$\frac{3}{4}$	.316	.474	.633	.792	.950	1.108	1.265	1.584	1.901	2.217	2.534	3.168
$\frac{7}{8}$	.369	.553	.738	.923	1.108	1.294	1.477	1.846	2.217	2.588	2.956	3.696
1	.422	.632	.845	1.056	1.267	1.478	1.690	2.112	2.534	2.956	3.380	4.224
$1\frac{1}{8}$	.474	.711	.950	1.187	1.425	1.663	1.901	2.375	2.850	3.326	3.802	4.752
$1\frac{1}{4}$	.528	.790	1.059	1.320	1.584	1.848	2.112	2.640	3.168	3.696	4.224	5.280
$1\frac{3}{8}$	.581	.869	1.161	1.452	1.742	2.032	2.325	2.904	3.484	4.065	4.646	5.808
$1\frac{1}{2}$	.634	.948	1.266	1.584	1.900	2.217	2.535	3.168	3.802	4.435	5.069	6.337
$1\frac{5}{8}$	.687	1.027	1.372	1.716	2.059	2.402	2.746	3.432	4.119	4.805	5.492	6.864
$1\frac{3}{4}$	.740	1.106	1.479	1.848	2.218	2.589	2.957	3.696	4.435	5.178	5.914	7.393
$1\frac{7}{8}$	.793	1.185	1.584	1.980	2.376	2.772	3.168	3.960	4.752	5.544	6.336	7.921
2	.846	1.264	1.689	2.112	2.534	2.957	3.379	4.224	5.069	5.914	6.758	8.448
$2\frac{1}{8}$	.899	1.343	1.795	2.244	2.693	3.141	3.591	4.488	5.386	6.283	7.181	8.977
$2\frac{1}{4}$	.952	1.422	1.900	2.376	2.851	3.326	3.802	4.751	5.703	6.653	7.604	9.505
$2\frac{3}{8}$	1.005	1.501	2.006	2.508	3.009	3.511	4.013	5.016	6.019	7.022	8.025	10.032
$2\frac{1}{2}$	1.058	1.580	2.112	2.640	3.168	3.696	4.224	5.280	6.336	7.392	8.448	10.560
$2\frac{3}{4}$	1.264	1.659	2.323	2.904	3.485	4.066	4.647	5.808	6.970	8.132	9.294	11.617
3	1.370	1.817	2.535	3.168	3.802	4.435	5.069	6.337	7.604	8.871	10.138	12.673
$3\frac{1}{4}$	1.476	1.975	2.746	3.432	4.119	4.805	5.492	6.865	8.237	9.610	10.983	13.730
$3\frac{1}{2}$	1.582	2.132	2.957	3.696	4.436	5.175	5.914	7.393	8.871	10.350	11.828	14.785
$3\frac{3}{4}$	1.688	2.291	3.168	3.960	4.752	5.544	6.336	7.921	9.505	11.089	12.673	15.841
4	1.794	2.449	3.380	4.224	5.069	5.914	6.759	8.448	10.138	11.828	13.518	16.897
$4\frac{1}{2}$	1.906	2.607	3.802	4.752	5.703	6.653	7.604	9.504	11.406	13.306	15.208	19.010
5	2.118	2.923	4.224	5.280	6.336	7.392	8.449	10.560	12.673	14.784	16.897	21.122
$5\frac{1}{2}$	2.330	3.239	4.647	5.808	6.970	8.132	9.294	11.616	13.940	16.264	18.587	23.234
6	2.542	3.555	5.070	6.337	7.604	8.871	10.138	12.674	15.208	17.742	20.276	25.346

WEIGHT OF ROUND AND SQUARE IRON PER FOOT.

SIZE.	1/4 in.	5/16 in.	3/8 in.	7/16 in.	1/2 in.	9/16 in.	5/8 in.	3/4 in.
Round.	.163	.26	.368	.51	.654	.84	1.02	1.47
Square.	.208	.32	.468	.65	.833	1.07	1.3	1.87
SIZE.	7/8 in.	1 in.	1 1/8 in.	1 1/4 in.	1 3/8 in.	1 1/2 in.	1 5/8 in.	1 3/4 in.
Round.	2.	2.61	3.31	4.00	4.94	5.89	6.91	8.01
Square.	2.55	3.33	4.21	5.2	6.3	7.5	8.8	10.20
SIZE.	1 7/8 in.	2 in.	2 1/8 in.	2 1/4 in.	2 3/8 in.	2 1/2 in.	2 5/8 in.	2 3/4 in.
Round.	9.2	10.47	11.82	13.25	14.76	16.36	18.03	19.79
Square.	11.71	13.33	15.05	16.87	18.80	20.8	22.96	25.2
SIZE.	2 7/8 in.	3 in.	3 1/8 in.	3 1/4 in.	3 3/8 in.	3 1/2 in.	3 5/8 in.	3 3/4 in.
Round.	21.63	23.56	25.56	27.65	29.82	32.07	34.4	36.81
Square.	27.55	30.	32.55	35.2	37.96	40.80	43.80	46.87
SIZE.	3 7/8 in.	4 in.	4 1/8 in.	4 1/4 in.	4 3/8 in.	4 1/2 in.	4 5/8 in.	4 3/4 in.
Round.	39.31	41.88	44.54	47.28	50.11	53.01	56.	59.06
Square.	50.05	53.33	56.71	60.20	63.80	67.50	71.3	75.2
SIZE.	4 7/8 in.	5 in.	5 1/4 in.					
Round.	62.21	65.45	73.2					
Square.	79.21	83.33	93.2					

WEIGHT OF IRON TIRE PER SET OF 54 FEET.

1 x 3/16 34	1 x 1/4 45	1 x 5/16 57	1 x 3/8 68	1 1/8 x 3/16 37	1 1/8 x 1/4 51
1 1/8 x 5/16 64	1 1/8 x 3/8 77	1 1/4 x 1/4 57	1 1/4 x 5/16 71	1 1/4 x 3/8 86	1 1/4 x 7/16 100
1 1/4 x 1/2 114	1 1/4 x 5/8 142	1 3/8 x 3/8 94	1 3/8 x 7/16 110	1 3/8 x 1/2 125	1 1/2 x 3/8 103
1 1/2 x 7/16 119	1 1/2 x 1/2 137	1 1/2 x 9/16 156	1 1/2 x 5/8 171	1 5/8 x 1/2 148	1 5/8 x 9/16 166
1 5/8 x 5/8 185	1 3/4 x 1/2 160	1 3/4 x 9/16 179	1 3/4 x 5/8 199	1 3/4 x 3/4 239	2 x 1/2 182
2 x 9/16 205	2 x 5/8 227	2 x 3/4 273	2 x 7/8 318	2 x 1 364	2 1/2 x 3/8 171
2 1/2 x 1/2 227	2 1/2 x 5/8 284	2 1/2 x 3/4 341	2 1/2 x 1 455	3 x 3/8 205	3 x 1/2 273
3 x 5/8 341	3 x 3/4 409	3 x 1 546	3 1/2 x 3/8 239	3 1/2 x 1/2 318	3 1/2 x 5/8 398
3 1/2 x 3/4 477	4 x 3/8 273	4 x 1/2 364	4 x 5/8 455	4 x 3/4 546	

WEIGHT OF HOOP IRON.

WEIGHT IN POUNDS PER LINEAL FOOT.

No. Gauge	WIDTH IN INCHES.				No. Gauge	WIDTH IN INCHES.				
	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1		$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
6	.4231	.5078	.5924	.6770	6	.762	.846	1.016	1.185	1.354
8	.3581	.4296	.5013	.5729	8	.645	.716	.859	1.003	1.146
10	.2929	.3515	.4101	.4687	10	.527	.586	.703	.820	.934
12	.2278	.2734	.3190	.3645	11	.469	.521	.625	.729	.833
14	.1628	.1953	.2278	.2604	12	.410	.456	.547	.638	.729
16	.1302	.1562	.1822	.2083	13	.352	.391	.469	.547	.625
17	.1139	.1367	.1595	.1822	14	.293	.326	.391	.456	.521
18	.0976	.1171	.1367	.1562	15	.264	.293	.352	.410	.469
19	.0895	.1074	.1253	.1432	16	.234	.260	.313	.365	.417
20	.0814	.0976	.1139	.1302	17	.205	.229	.273	.319	.365
21	.0731	.0877	.1023	.1169	18	.176	.195	.234	.273	.313
22	.0651	.0781	.0911	.1041	19	.161	.179	.215	....	....
23	.0588	.0705	.0822	.0939	20	.146	.163	.195	....	....

WEIGHT OF STEEL TIRE PER SET OF 54 FEET.

$\frac{5}{8}$ x $\frac{1}{16}$ $7\frac{1}{2}$	$\frac{3}{4}$ x $\frac{3}{32}$ $13\frac{1}{4}$	$\frac{7}{8}$ x $\frac{3}{32}$ $15\frac{1}{4}$	1 x $\frac{1}{8}$ $23\frac{3}{4}$	1 x $\frac{5}{16}$ $58\frac{1}{2}$	$1\frac{1}{4}$ x $\frac{1}{4}$ 59
$1\frac{1}{8}$ x $\frac{7}{16}$ 124	$\frac{5}{8}$ x $\frac{3}{32}$ $11\frac{1}{2}$	$\frac{3}{4}$ x $\frac{1}{8}$ 18	$\frac{7}{8}$ x $\frac{1}{8}$ $20\frac{1}{4}$	1 x $\frac{5}{32}$ $29\frac{1}{2}$	$1\frac{1}{8}$ x $\frac{3}{16}$ $40\frac{1}{2}$
$1\frac{1}{4}$ x $\frac{5}{16}$ 74	$1\frac{1}{2}$ x $\frac{1}{2}$ 142	$\frac{5}{8}$ x $\frac{1}{8}$ $15\frac{1}{4}$	$\frac{3}{4}$ x $\frac{5}{32}$ 22	$\frac{7}{8}$ x $\frac{5}{32}$ 25	1 x $\frac{3}{16}$ $35\frac{1}{2}$
$1\frac{1}{8}$ x $\frac{1}{4}$ 54	$1\frac{1}{4}$ x $\frac{3}{8}$ $88\frac{1}{2}$	$1\frac{5}{8}$ x $\frac{1}{2}$ 154	$\frac{5}{8}$ x $\frac{3}{16}$ $22\frac{3}{4}$	$\frac{3}{4}$ x $\frac{3}{16}$ 27	$\frac{7}{8}$ x $\frac{3}{16}$ $30\frac{1}{2}$
1 x $\frac{7}{32}$ $42\frac{1}{4}$	$1\frac{1}{8}$ x $\frac{5}{16}$ $67\frac{1}{2}$	$1\frac{3}{8}$ x $\frac{3}{8}$ 98	$1\frac{3}{4}$ x $\frac{1}{2}$ 165	$\frac{7}{8}$ x $\frac{7}{32}$ $35\frac{1}{2}$	$\frac{3}{4}$ x $\frac{1}{4}$ $35\frac{1}{2}$
$\frac{7}{8}$ x $\frac{1}{4}$ $40\frac{1}{2}$	1 x $\frac{1}{4}$ $47\frac{1}{2}$	$1\frac{1}{8}$ x $\frac{3}{8}$ 81	$1\frac{1}{2}$ x $\frac{3}{8}$ 107	2 x $\frac{1}{2}$ 190	

WEIGHT OF OVALS AND HALF OVALS.

Weight per Lineal Foot.

OVAL.

SIZE	WEIGHT	SIZE	WEIGHT
$\frac{3}{8}$ x $\frac{3}{16}$	.186	$\frac{7}{8}$ x $\frac{7}{16}$	1.013
$\frac{7}{16}$ x $\frac{7}{32}$	.253	1 x $\frac{1}{2}$	1.323
$\frac{1}{2}$ x $\frac{1}{4}$	.331	1$\frac{1}{8}$ x $\frac{9}{16}$	1.624
$\frac{5}{8}$ x $\frac{5}{16}$	.517	1$\frac{1}{4}$ x $\frac{5}{8}$	2.067
$\frac{3}{4}$ x $\frac{3}{8}$	.744	1$\frac{1}{2}$ x $\frac{3}{4}$	2.976

HALF OVAL.

SIZE	WEIGHT	SIZE	WEIGHT
$\frac{3}{8}$ x $\frac{3}{32}$	.093	$\frac{7}{8}$ x $\frac{7}{32}$	.507
$\frac{7}{16}$ x $\frac{7}{64}$	.127	1 x $\frac{1}{4}$	.662
$\frac{1}{2}$ x $\frac{1}{8}$	.166	1$\frac{1}{8}$ x $\frac{9}{32}$	.812
$\frac{5}{8}$ x $\frac{5}{32}$	.259	1$\frac{1}{4}$ x $\frac{5}{16}$	1.034
$\frac{3}{4}$ x $\frac{3}{16}$	.372	1$\frac{1}{2}$ x $\frac{3}{8}$	1.488

WEIGHT OF PLATE IRON.

Per Square Foot.

	POUNDS		POUNDS		POUNDS		POUNDS
$\frac{1}{8}$ in.	5.035	$\frac{3}{10}$ in.	12.084	$\frac{1}{2}$ in.	20.141	$\frac{9}{4}$ in.	30.211
$\frac{3}{16}$ "	7.552	$\frac{5}{16}$ "	12.587	$\frac{9}{16}$ "	22.659	$\frac{7}{8}$ "	35.247
$\frac{1}{4}$ "	10.070	$\frac{3}{8}$ "	15.106	$\frac{5}{8}$ "	25.176	1 "	40.282
$\frac{13}{48}$ "	10.909	$\frac{7}{16}$ "	17.623				

WEIGHT OF SHEET IRON.

Per Square Foot.

NO.	POUNDS	NO.	POUNDS	NO.	POUNDS	NO.	POUNDS
0	13.696	6	8.177	12	4.374	20	1.404
1	12.085	7	7.251	14	3.330	22	1.123
2	11.440	8	6.621	15	2.889	24	.883
3	10.443	9	5.938	16	2.608	25	.803
4	9.587	10	5.377	17	2.327	26	.722
5	8.862	11	4.815	18	1.966	27	.642

All weights mentioned in this table are estimated weights only.

THICKNESS OF GAUGE IN INCHES.

No.	1	3	6	8	10	12	14	16	18	21	27
About	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{3}{16}$	$\frac{11}{64}$	$\frac{1}{8}$	$\frac{7}{64}$	$\frac{5}{64}$	$\frac{1}{16}$	$\frac{3}{64}$	$\frac{1}{32}$	$\frac{1}{64}$

STANDARD SCREW THREADS.

Recommended by the Franklin Institute, Philadelphia.

SCREW	THREADS	SCREW	THREADS
Diameter, $\frac{1}{4}$ in.	20 per in.	Diameter, 1$\frac{1}{8}$ in.	7 per in.
" $\frac{5}{16}$ "	18 "	" 1$\frac{1}{4}$ "	7 "
" $\frac{3}{8}$ "	16 "	" 1$\frac{3}{8}$ "	6 "
" $\frac{7}{16}$ "	14 "	" 1$\frac{1}{2}$ "	6 "
" $\frac{1}{2}$ "	13 "	" 1$\frac{5}{8}$ "	5$\frac{1}{2}$ "
" $\frac{9}{16}$ "	12 "	" 1$\frac{3}{4}$ "	5 "
" $\frac{5}{8}$ "	11 "	" 1$\frac{7}{8}$ "	5 "
" $\frac{3}{4}$ "	10 "	" 2 "	4$\frac{1}{2}$ "
" $\frac{7}{8}$ "	9 "	" 2$\frac{1}{4}$ "	4$\frac{1}{2}$ "
" 1 "	8 "	" 2$\frac{1}{2}$ "	4 "

VALUE OF IRON PER GROSS TON OF 2,240 POUNDS.

AT FROM 2 TO 8 CENTS PER POUND.

2	44 80	3½	78 40	5	112 00	6½	145 60
2⅛	47 60	3⅝	81 20	5⅛	114 80	6⅝	148 40
2¼	50 40	3¾	84 00	5¼	117 60	6¾	151 20
2⅜	53 20	3⅞	86 80	5⅜	120 40	6⅞	154 00
2½	56 00	4	89 60	5½	123 20	7	156 80
2⅝	58 80	4⅛	92 40	5⅝	126 00	7⅛	159 60
2¾	61 60	4¼	95 20	5¾	128 80	7¼	162 40
2⅞	64 40	4⅜	98 00	5⅞	131 60	7⅜	165 20
3	67 20	4½	100 80	6	134 40	7½	168 00
3⅛	70 00	4⅝	103 60	6⅛	137 20	7⅝	170 80
3¼	72 80	4¾	106 40	6¼	140 00	7¾	173 60
3⅜	75 60	4⅞	109 20	6⅜	142 80	7⅞	176 40

WEIGHTS OF BURDEN'S HORSE AND MULE SHOES.

Horse Shoes.	Light Pattern.	Medium Pattern.	Heavy Pattern.
No. 0, Fore.....	12 ounces.	.....	.....
" 1, "	14 "	17 ounces.	19 ounces.
" 2, "	17 "	20 "	23 "
" 3, "	20 "	24 "	26 "
" 4, "	24 "	28 "	32 "
" 5, "	29 "	34 "	39 "
" 6, "	36 "	41 "	46 "
" 7, "		48 "	
" 0, Hind.....	10 "		
" 1, "	11 "	14 "	15 "
" 2, "	14 "	16 "	18 "
" 3, "	18 "	20 "	23 "
" 4, "	22 "	24 "	27 "
" 5, "	27 "	29 "	32 "
" 6, "	32 "	35 "	38 "
" 7, "	.....	38 "	.....

No. 1, Mule	10 ounces
" 2, "	12 "
" 3, "	15 "
" 4, "	19 "
" 5, "	24 "

NUMBER OF RIVETS TO THE POUND.

LENGTH.	Wire.	Wire.	Wire.	Wire.	Wire.	Wire.	Wire.
INCH.	$\frac{3}{8}$	$\frac{5}{16}$	$\frac{1}{4}$	No. 6	$\frac{3}{16}$	No. 7	No. 8
$\frac{1}{2}$	28	48	83	130	150	160	210
$\frac{3}{4}$	24	39	62	104	125	136	160
$\frac{7}{8}$	22	31	55	91	108	116	142
1	20	28	50	83	94	102	125
$1\frac{1}{4}$	18	26	43	68	80	88	110
$1\frac{1}{2}$	16	22	38	62	71	75	96
$1\frac{3}{4}$	14	20	33	54	64	67	83
2	13	18	29	48	56	60	72
$2\frac{1}{4}$	12	16	25	41	48	52	66
$2\frac{1}{2}$	11	15	23	37	44	47	57
$2\frac{3}{4}$	10	14	21	34	40	43	52
3	9	13	20	31	37	39	48
$3\frac{1}{4}$	9	12	19	29	35	37	46
$3\frac{1}{2}$	8	12	18	27	33	35	44
$3\frac{3}{4}$	7	11	17	26	32	34	43
4	7	10	16	25	31	33	41

WEIGHT OF 100 COACH OR LAG SCREWS.

Diameters.	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
Lengths.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
$1\frac{1}{2}$	6.88	.....	.....	.....	.....
$1\frac{3}{4}$	7.5	11.75	16.88	.....	.....
2	8.25	12.62	17.18	.....	.....
$2\frac{1}{4}$	9.25	12.88	18.07	.....	.....
$2\frac{1}{2}$	9.62	13.28	19.18	.....	.....
3	10.82	16.62	22.00	34.07	.....
$3\frac{1}{2}$	11.5	18.18	24.00	35.88	.....
4	13.31	18.88	26.82	39.25	64.00
$4\frac{1}{2}$	14.82	19.5	28.25	42.62	67.88
5	16.5	21.25	30.27	47.75	71.37
$5\frac{1}{2}$	17.37	23.56	33.88	51.62	79.37
6	18.82	25.31	35.37	55.12	86.62
7	.....	.....	38.94	61.88	92.75
8	.....	.....	44.37	68.75	97.5
9	.....	.....	.....	77.00	108.75
10	.....	.....	.....	90.00	124.75
11	.....	.....	.....	94.88	132.81
12	.....	.....	.....	100.55	146.75

CIRCUMFERENCE OF CIRCLES.

Diameter. Inches.	Circumference Inches.	Diameter. Inches.	Circumference Inches.	Diameter. Inches.	Circumference Inches.
12	37.69	36	113.0	60	188.4
14	43.68	38	119.3	62	184.8
16	50.26	40	125.6	64	201.0
18	56.54	42	121.9	66	207.3
20	62.85	44	138.2	68	213.6
22	69.11	46	144.5	70	219.9
24	75.39	48	150.7	72	226.1
26	81.68	50	157.0	74	232.4
28	87.96	52	163.3	76	238.7
30	94.24	54	169.9	78	245.0
32	100.5	56	175.9	80	251.3
34	106.8	58	182.2		

WEIGHT OF METALS.

Per Square Foot.

Thickness. Inches.	Wrought Iron Pounds.	Cast Iron. Pounds.	Steel. Pounds.	Brass. Pounds.	Copper. Pounds.
$\frac{1}{16}$	2.51	2.34	2.55	2.67	2.89
$\frac{1}{8}$	5.03	4.69	5.10	5.35	5.78
$\frac{3}{16}$	5.55	7.03	7.66	8.02	8.67
$\frac{1}{4}$	10.07	9.38	10.21	10.7	11.56
$\frac{5}{16}$	12.58	11.73	12.76	13.37	14.45
$\frac{8}{8}$	15.10	14.07	15.31	16.05	17.34
$\frac{7}{16}$	17.62	16.42	17.87	18.72	20.23
$\frac{1}{2}$	20.14	18.77	20.42	21.4	23.12
$\frac{9}{16}$	22.65	21.11	22.97	24.07	26.01
$\frac{5}{8}$	25.17	23.46	25.52	26.75	28.90
$\frac{11}{16}$	27.69	25.81	28.08	29.42	31.97
$\frac{8}{4}$	30.21	28.15	30.63	32.1	34.68
$\frac{13}{16}$	32.72	30.50	33.18	35.19	37.57
$\frac{7}{8}$	35.24	32.85	35.73	38.28	40.69
$\frac{15}{16}$	37.76	35.19	38.28	41.37	43.35
1	40.28	37.54	40.83	43.75	46.25

BOARD MEASURE.

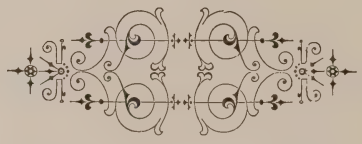
The following Tables give feet of Board Measure to one running foot of board.
Area of a running foot multiplied by length in feet, will give superficial contents of board in square feet.

THICKNESS.	WIDTH OF BOARD IN INCHES.																	
Inches.	½	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4	4¼	4½	4¾
¼	.0104	.0156	.0208	.026	.0313	.0365	.0417	.0469	.0521	.0573	.0625	.0678	.073	.078	.0833	.0885	.0937	.099
½	.0209	.0313	.0417	.0521	.0625	.0729	.0833	.0938	.1042	.1145	.125	.1355	.1457	.1562	.1668	.177	.1875	.198
¾	.0313	.0469	.0625	.0781	.0938	.1094	.125	.1406	.1563	.172	.1875	.203	.2188	.2344	.25	.2656	.3813	.297
1	.0417	.0625	.0833	.1042	.125	.1458	.1667	.1875	.2083	.2292	.25	.2708	.2917	.3125	.3334	.3542	.375	.3958
¼	.0521	.0781	.1042	.1302	.1563	.1823	.2083	.2344	.2604	.2865	.3125	.3385	.3645	.3906	.4167	.4426	.4687	.494
½	.0625	.0938	.125	.1563	.1875	.2188	.25	.2813	.3125	.3438	.375	.4062	.4375	.4687	.5	.5314	.5625	.5938
¾	.0729	.1094	.1458	.1823	.2187	.2552	.2917	.3281	.3646	.401	.4375	.474	.5105	.5470	.5834	.6198	.6563	.6927
2	.0833	.125	.1667	.2083	.25	.2917	.3333	.375	.4166	.4583	.5	.5417	.5834	.625	.6667	.7084	.75	.7917
¼	.0938	.1406	.1875	.2344	.2813	.3281	.375	.4219	.4688	.5155	.5625	.6035	.6563	.703	.75	.797	.8437	.8905
½	.1042	.1563	.2083	.2604	.3125	.3646	.4167	.4688	.5208	.573	.625	.677	.7292	.7814	.8334	.8855	.9375	.9895
¾	.1146	.1719	.2292	.2865	.3438	.401	.4583	.5156	.573	.6302	.6875	.7448	.802	.8595	.9167	.974	1.03	1.09
3	.125	.1875	.25	.3125	.375	.4375	.5	.5625	.625	.6875	.75	.8125	.875	.9375	1.	1.063	1.125	1.188
¼	.1355	.2032	.2708	.3385	.4063	.4739	.5416	.6094	.677	.7448	.8125	.8802	.948	1.016	1.083	1.15	1.22	1.286
½	.1457	.2186	.2917	.3646	.4375	.5104	.5833	.6563	.7292	.802	.875	.948	1.021	1.095	1.168	1.24	1.314	1.386
¾	.1563	.2345	.3125	.3906	.4689	.5469	.625	.7031	.7813	.8595	.9375	1.015	1.095	1.172	1.25	1.327	1.406	1.485
4	.1666	.25	.3333	.4167	.5	.5833	.6667	.75	.8333	.9167	1.	1.802	1.168	1.25	1.333	1.415	1.5	1.583
¼	.177	.2655	.3542	.4427	.5312	.6198	.7083	.797	.8854	.974	1.062	1.15	1.24	1.328	1.418	1.505	1.595	1.682
½	.1875	.2813	.375	.4688	.5625	.6563	.75	.8438	.9375	1.03	1.125	1.22	1.313	1.405	1.5	1.593	1.689	1.782
¾	.198	.297	.3958	.4948	.5938	.6927	.7917	.8905	.9895	1.086	1.187	1.285	1.385	1.485	1.584	1.68	1.73	1.88
5	.2083	.3125	.4167	.5208	.625	.7292	.8333	.9375	1.004	1.146	1.25	1.355	1.457	1.567	1.667	1.77	1.875	1.98
¼	.2187	.3231	.4375	.547	.6562	.7655	.875	.9845	1.095	1.203	1.313	1.421	1.53	1.645	1.75	1.858	1.97	2.077
½	.2291	.3437	.4583	.5729	.6875	.802	.9166	1.03	1.145	1.26	1.375	1.49	1.603	1.722	1.834	1.946	2.063	2.178
¾	.2395	.3594	.4791	.599	.7187	.8385	.9583	1.077	1.198	1.319	1.438	1.556	1.675	1.8	1.916	2.034	2.155	
6	.25	.375	.5	.625	.75	.875	1.	1.125	1.25	1.375	1.5	1.625	1.75	1.875	2.	2.125	2.25	2.375

BOARD MEASURE.—CONTINUED.

THICKNESS.	WIDTH OF BOARD IN INCHES.																
Inches.	5	5¼	5½	5¾	6	6½	6¾	7	7½	8	8½	9	9½	10	10½	11	11½	12
¼	.1042	.1095	.1145	.1198	.125	.1355	.1405	.1458	.1563	.1666	.1771	.1875	.198	.2083	.2187	.2292	.2395	.25
½	.2084	.2189	.2292	.2395	.25	.2708	.2813	.2917	.3125	.3334	.3542	.375	.3958	.4167	.4375	.4583	.4792	.5
¾	.3125	.328	.3438	.3597	.375	.4063	.422	.4375	.4687	.5	.5312	.5625	.5938	.625	.6562	.6875	.7187	.75
1	.4166	.4375	.4584	.4792	.5	.5416	.5625	.5834	.625	.6667	.7084	.75	.7916	.8334	.875	.9167	.9584	1.
¼	.5208	.547	.573	.599	.625	.677	.703	.7292	.7814	.8334	.8855	.9375	.9896	1.042	1.094	1.146	1.198	1.25
½	.625	.6562	.6875	.7187	.75	.8125	.8438	.875	.9375	1.	1.062	1.125	1.187	1.25	1.312	1.375	1.437	1.5
¾	.7292	.7655	.802	.8385	.875	.948	.9844	1.02	1.095	1.166	1.24	1.312	1.385	1.458	1.531	1.605	1.677	1.75
2	.8334	.875	.9166	.9584	1.	1.083	1.125	1.166	1.25	1.333	1.417	1.5	1.583	1.667	1.75	1.833	1.917	2.
¼	.9375	.9845	1.03	1.077	1.125	1.22	1.266	1.314	1.406	1.5	1.595	1.687	1.78	1.875	1.963	2.062	2.155	2.25
½	1.042	1.095	1.145	1.198	1.25	1.354	1.406	1.459	1.563	1.667	1.77	1.875	1.98	2.083	2.187	2.292	2.395	2.5
¾	1.145	1.203	1.26	1.318	1.375	1.49	1.547	1.604	1.72	1.834	1.948	2.063	2.177	2.292	2.406	2.521	2.635	2.75
3	1.25	1.313	1.375	1.438	1.5	1.625	1.688	1.75	1.875	2.	2.125	2.25	2.375	2.5	2.625	2.75	2.875	3.
¼	1.354	1.422	1.49	1.557	1.625	1.76	1.828	1.895	2.03	2.167	2.302	2.437	2.573	2.708	2.845	2.98	3.115	3.25
½	1.458	1.53	1.605	1.678	1.75	1.896	1.97	2.042	2.187	2.334	2.48	2.625	2.77	2.917	3.063	3.208	3.354	3.5
¾	1.564	1.64	1.72	1.797	1.875	2.031	2.109	2.187	2.345	2.5	2.655	2.812	2.97	3.125	3.28	3.437	3.594	3.75
4	1.668	1.75	1.834	1.917	2.	2.167	2.25	2.334	2.5	2.667	2.834	3.	3.167	3.334	3.5	3.667	3.833	4.
¼	1.77	1.857	1.948	2.035	2.125	2.302	2.39	2.48	2.655	2.833	3.01	3.188	3.365	3.542	3.719	3.896	4.073	4.25
½	1.875	1.97	2.063	2.155	2.250	2.438	2.53	2.625	2.813	3.	3.187	3.375	3.562	3.75	3.938	4.125	4.313	4.5
¾	1.98	2.079	2.176	2.275	2.375	2.573	2.672	2.77	2.97	3.166	3.366	3.563	3.76	3.958	4.155	4.354	4.552	4.75
5	2.084	2.187	2.292	2.395	2.5	2.708	2.813	2.917	3.125	3.334	3.542	3.75	3.958	4.16	4.375	4.583	4.79	5.
¼	2.187	2.297	2.405	2.515	2.625	2.845	2.954	3.063	3.28	3.5	3.72	3.937	4.155	4.375	4.595	4.813	5.032	5.25
½	2.293	2.406	2.52	2.634	2.750	2.98	3.095	3.209	3.437	3.666	3.896	4.125	4.353	4.584	4.812	5.041	5.27	5.5
¾	2.397	2.516	2.635	2.755	2.875	3.116	3.234	3.355	3.595	3.834	4.072	4.313	4.553	4.793	5.03	5.271	5.51	5.75
6	2.5	2.625	2.75	2.875	3.	3.25	3.375	3.5	3.75	4.	4.25	4.5	4.75	5.	5.25	5.5	5.75	6.

APPLICATION OF TABLE.—A board is 1 inch thick, 1 foot 4¾ inches wide by 21 feet long. What is its contents? Answer:—1 foot equal 1, and 4¾ equal .3958; therefore 1 foot 4¾ inches equal 1.3958, multiplied by 21, equal 29.3, which is contents of board.



INDEX.

A.

Axles, Iron..... 49
Steel..... 50
Kritch Patent..... 50
Miller Patent..... 51
Anvils..... 76
Anti Rattler, 5th Wheel.....158
Ladd's Shaft.....162
Rubber.....183
Axle Clip Ties.....182–183
Axle Yokes, Mallleable.....239
Axle and Spring Blocks.....240
Axles, Wood Wagon.....318
Ash, Plank.....319

B.

Babbitt Metal..... 48
Burs, Riveting..... 15
Bolts, Carriage..... 16
" Phil..... 18
" Skelley..... 19
Tire..... 17
" Skelley..... 20
Thimble Skein..... 20
Machine..... 21
Sleigh Shoe..... 22
Shaft..... 23
Step..... 24
Shackle..... 24
Silver Loop..... 24
Cone Head..... 25
Steeple Head..... 25
Elliptic Head..... 25
Whiffletree.....26–27
Bolt Ends..... 23
Borax..... 40
Bob Sled Shoes..... 45
Box Puller..... 68
Band Setter..... 72
Bellows..... 76
Bolt Cutters.....91 to 97
Bolt Clippers..... 97
Blowers, Blacksmith's...110 to 112
Buttress, " 125
Box Straps, Wagon.....138
Bolster Plates, Wrought.....139
Cast.....140
Platform. 227
Box or Bow Staples.....143
Box Rods.....141
Brake Ratchet, Wrought.....140
Malleable.....263
Body Loops.....175
Buffers, Spring.....183
Bow Sockets.....202
Bands, Carriage.....211–212
Sand.....213–254
Bow Iron, Buggy.....235
Wagon.....256
Back Bars.....270
Buggy Parts.....284
Bows.....285
Bob Runners.....293
Bob-Sleigh Stuff.....293
Buggy Seats.....293
Bodies, Buggy, Etc.....297 to 307
Hearse.....308–309
Bolsters, Wagon.....316

C.

Chain..... 31
Crow Bars..... 40

INDEX.

Cordage 48
Connecting Rods..... 51
Clamps, Screw..... 73–74
Corner..... 75
Tire Bolt..... 74
Shackle..... 75
Extension 75
Counter Sinks..... 87
Clips, Singletree With Hook....147
Singletree.....144
Axle.....164 to 166
Spring Bar.....167
Seward's Fancy.....168 to 170
Side Bar.....167
Short Spring.....170
French Coach.....171
Coach Axle.....171
Axle Saddle.....172
American Coach 172
Saddle.....173
Double Perch Saddle.....174
Miller's Spring.....174
Clip Ties.....182–183
Chucks, Worcester Drill..... 93
Cold Chisels, Hand.....124
Blacksmith's.....126
Chisels, Hot.....126
Clevises, Wrought 150–151
Malleable.....258 to 262
Carriage Hardware.....155 to 220
Couplings, Shaft.....161–162
Pole.....163
Corner Iron, Wrought.....195
Malleable.....230 to 232
Cushions.....205
Circle Posts.....255
Coach Beds, Bent.....287
Cutter Stuff.....291–292
Cutter Runners.....292
Cultivator Handles.....294
Cutters.....310 to 313
Carriage Parts.....286

D.

Dies..... 83
Drill Bits, Morse..... 89
Bit Stock..... 90
Wood Boring..... 90
Drills, Tire 116
Worcester .....116 to 120
Green River 121
Coe's 122
Drill Chuck..... 99
Doubletree Plates.....142
Dashes 181
Dash Moulding.....208
Doubletrees.....283

E.

Excelsior..... 48
Equalizers..... 51
End Board, Nuts and Washers..254
Eveners 283

F.

Files 46–47
Floats, Woodworker's..... 65
Forges.....111 to 115
Large B. S.....265
Flatters.....125
Fullers 126
Fifth Wheels .....155 to 158
Felloe Plates.....173
Fenders 208
Falls, Buggy.....205
Foot Rails.....207
Felloes 276
Futchels.....286
Fenders and Raves.....292

G.

Glue..... 42

INDEX.

Gears, Timken..... 61
Brewster..... 60
Gear Irons, Timken.....194
Gears, Platform Wagon.....196
Gearing, Buggy.....284
Wagon.....295

H.

Horse Shoes, Iron..... 34
Steel..... 35
Horse Nails, Northwestern..... 36
Star..... 37
Putnam..... 38
Ausable..... 39
Harrow Teeth..... 40
Hub Boxing Machines.....64 to 68
Hollow Augers.....69 to 71
Horse Shoer's Machine..... 99
Hammers.....124 to 129
Hardies.....125
Hammer Straps, Wrought.....145
Malleable.....255
Hold Backs, Malleable.....227
Hubs, Oak and Locust.....271
Birch Wagon.....272
Sulky.....273
Buggy.....273
Hounds, Bent.....280
Sawed.....295
Handles, Hammer and Sledge..314
Hickory Plank.....317
Harrow Stuff.....319

I.

Iron, Standard List.....5–6
Hoop..... 7
Norway..... 8
Tongue Cap..... 8
Saw Mill Track..... 8
Hub and Sand Band..... 6

J.

Jack Screws.....41
Joint Ends.....201

K.

King Bolts, Wagon.....143
Clip.....159
King Bolt Yokes.....160
Plates.....254
Knives, Farrier's..... 80
Knees and Beams.....292

L.

Loops, Malleable Iron.....238
Lead Bars.....287
Lumber.....315 to 321

M.

Mandrels..... 80
Malleable Iron.....221 to 263
Machines, Spoke Tenoning..... 69
Hub Boxing.....64 to 68
Horse Shoer's..... 99
Screw Cutting.....91 to 97

N.

Nails, Standard Card..... 9
Wagon..... 30
Horse Shoe.....36 to 39
Nuts, Square..... 13
Hexagon..... 14
Nut Wrench..... 88
Neck Yoke Plates.....145
Eye and Ring.....146
Irons Complete.....146
Ferrule and Ring.....146
Eyes.....147
Neck Yokes, Wagon Ironed....149
Neck Yoke Leathers.....207

INDEX.

Nail Rods..... 8
Nuts, Malleable Thumb.....252
Loop Head.....252
Neck Yokes.....381-282
Trimmed.....296
Name Plates.....264

O.

Open Links.....152
Oscillator.....197
Offsets.....179-180

P.

Paint Mills..... 42
Post Mauls..... 45
Punch, Summit City.....106
Punch and Shear.....107-108
Punch and Shrinker.....105
Pincers.....125
Pully Blocks.....154
Pole Eyes.....163
Pole Couplings.....163
Pole Yokes, Malleable.....253
Perch Ends.....177
Perch and Bed Plates.....184
Plow Hooks.....262
Poles.....279-280
Pole Circles.....280
Platform Parts.....286
Plow Handles.....294
Plow Beams.....295
Plow Rungs.....294

Q.

Quarts..... 42

R.

Rivets..... 29
Rasps..... 47
Reamers..... 87
Rim Wrench..... 93
Reach Plates.....142
Rub Irons.....143
Rods, Wagon Box.....141
Rims.....274-275
Reaches, Side Bar.....276
Phaeton, Etc.....286
Wagon.....316
Rattan Moulding.....296

S.

Steel.....10 to 12
Screws..... 28
Wagon Skein..... 20
Coach or Lag..... 22
Screw Cutting Machines...91 to 97
Screw Plates, Lightning.....84-85
Sand Paper..... 42
Springs, Shapes of.....52 to 57
Standard List..... 58
Cast Steel..... 59
Seat and Sulky..... 59
Timken.....61-62
Brewster.....60
Bolster..... 63
Spoke Tenoning Machine..... 69
Spoke Pointer..... 71
Swage Block..... 80
Stocks and Dies.....81-82
Sledges.....123-124
Swages.....126
Stay Chain Bolt.....140
Staples, Bow or Box.....143
Steps, Buggy.....186 to 193
Side Bar.....194
Platform Wagon.....220
Malleable.....246 to 250
Side Bar Spring Shackles.....171
Step Plates, Malleable.....244-245
Stay Ends.....178
Oval.....180

INDEX.

Stay End Ties.....180–181
Solid Collars.....176
Shifting Rails.....184–185
Shaft Couplings.....161–162
Shaft and T Irons.....228–229
Shaft Rubbers.....183
Singletrees, Finished.....149
Singletree Irons, all kinds..147–148
Stump Joints.....199
Slat Irons.....200–201
Stay Irons, Back.....234–235
Seat Risers.....257–198
Seat Hooks, Wrought.....151
Malleable.....263
Seat Spring Rests.....263–152
Seat Irons, Malleable.....233
Seat Handles.....236
Seat Braces.....237
Spring Shackles.....239
Spring and Axle Blocks.....240
Spring Ties.....241
Stake Rings.....255
Stake Irons.....256
Shovel Plow Points..... 12
Seat Fasteners, Dolson's.....185
Wisell's.....266
Standard Brace.....257
Silver Plating.....264
Spokes, Oak.....269
Hickory.....270
Shafts.....277–278
Singletrees.....282–283
Side Bars.....284
Seat Spindles.....286
Sleighs.....310 to 313
Seats, Buggy.....293

T.

Toe Calks,..... 34
Thimble Skeins..... 43
Thimble Skeins, Steel..... 45
Parts..... 44
Taper Auger..... 72
Tweer Irons.....78–79
Taps..... 83
Lightning.....86–87
Machine..... 88
Tire Gauges..... 98
Benders.....100–101
Shrinker.....102 to 104
Shrinker and Punch.....105
Punch and Shears.....109
Tongue Caps.....138
Plates.....142
Timken Gear Irons.....194
Top Braces.....203
Tops, Buggy.....204–205
Top Prop Blocks.....209
Top Prop Washers.....209
Top Props.....210
Top Prop Nuts.....210
Tips, Shaft.....214–215
Whiffletree.....215–216
Pole.....217
Neck Yoke.....218–219
Malleable.....253
Tongs, Blacksmith's.....125
Tongues, Wagon.....318
Tables, Valuable.....322 to 335

V.

Vises, Solid Box..... 77
Vise, Boxes and Screw..... 78
Vises, Parker's Bench...130 to 132
Prentiss.....133–134
Simpson.....135–136
Stevens..... 137

W.

Wrenches, Coe's..... 32

INDEX.

Wrenches, Girard 33
Nut 88
Rim 93
Malleable 251
Washers, Iron 15
Axle 48
Wedges 40
Wagon Hardware ..... 138 to 153
Wagon Jacks 152
Wagon Locks 153
Whiffletree Plates 156
Malleable 224
Whiffletree Hooks, Spring 202
Whiffletree Hooks, Malleable 224
Whiffletree Tongues 223
Whiffletree Couplings 225–226
Whip Sockets 206
Washer Cutter 209
Wear Irons ..... 242 to 244
Wagon Box Brace, Malleable 235
Wheels, Sarven Patent 288
Banded Hub 289
Wood Hub 290
Sulky 289
Wagon Box Boards 320–321
Weights, Table of ..... 322 to 335

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